

THE

Desert

M A G A Z I N E

SEPTEMBER, 1940

25 CENTS

Writers of the Desert . . .

This month's feature story about the Apache chief, Cochise, was actually written in the heart of Dragoon mountains in Arizona where the Indian fighter had his rendezvous during much of the 10 years he was on the warpath against the white men.

SHERMAN BAKER, the writer of the historical sketch, lives with Mrs. Baker at an abandoned ranger station. When they go to town (Tucson is 85 miles away) they travel over 40 miles of rough mountain road before they reach the paved highway.

"We have no telephone," writes Sherman, "and our nearest neighbor is three miles away. Leading a simple life far away from a world gone mad, we consider ourselves the luckiest and happiest people alive."

Baker was born in Norfolk, Virginia, and is a graduate of the University of Arizona. At various times he has resided in West Indies, France and England, and has served as seaman, prospector and government clerk. At present he is devoting all his time to research and writing on Southwestern subjects.

JOHN HILTON loaded his bedroll in his old desert car in August and took the sandy road that leads up Salt creek wash and into the Orocopia mountains. John believes there is more gem material in that area than has been reported—and if the trip is successful he will be telling the readers of the Desert Magazine about it later. Many hundreds of collectors have visited the Orocopia bloodstone field which Hilton reported in this magazine in March, 1938, and some very fine specimens have been brought out.

MARY BEAL, who writes the botanical features for the Desert Magazine, is spending August in Riverside where she was a member of the public library staff before she moved to the Judge Van Dyke ranch at Daggett in 1910. Miss Beal will write about the desert sage family for the October number.

GEORGE E. PERKINS of Overton, Nevada, who has supplied much authentic historical data for the Desert Magazine staff, including the story of the renegade Pahute Indian, Mouse, has filed as a candidate for the Nevada state assembly subject to the will of the voters in November.

ARTHUR and LOUISE EATON who write and edit the gem and mineral department for the Desert Magazine, are spending the summer in the Northwest. It is partly a vacation trip and partly a field trip in behalf of their editorial work.

ARTHUR WOODWARD, curator of history in the Los Angeles Museum, who is a frequent contributor to the Desert Magazine, spent the past month in Mexico doing field and library research work in archaeology and history.

In judging the merit of feature articles submitted to the Desert Magazine, the staff regards good photography as no less important than readable text matter. Pictures should be 5x7 or larger, glossy prints, and must have sharp focus, strong contrast, clear detail and good composition. It is useless to try to sell a feature to this market when pictures are mediocre, or worse. Less than 10 percent of the manuscripts received at the office are accompanied by acceptable photography.

This magazine pays one cent a word for feature material accepted, and from \$1.00 to \$3.00 each for photographs. An average of 150 manuscripts are received and read by the staff each month—and about five out of every 150 are accepted. This does not include the hundreds of poems that come in every month.

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SEPTEMBER

DESERT Calendar

AUG. 31 Dig-N-Dogie Days, annual rodeo and western celebration at Kingman, Arizona. (3 days)

31 Annual Fiesta, Santa Fe, New Mexico. Inaugurated by Governor Peñuela in 1712. (3 days)

31 Deming Downs race meet, Deming, New Mexico. (3 days)

31 Sierra Club of Southern California takes boat trip on Lake Mead and lower gorge of Colorado river. Reservations: Mr. and Mrs. Russell Hubbard, 2071 Balmer Dr., Los Angeles, California. (3 days)

31 Coronado Entrada pageant to be presented in Clifton, Arizona. (3 days)

SEPT. 1 Southwest Museum, Los Angeles, California, opens with exhibit of Indian drawings by Eben F. Comins. Open daily, free, except Monday.

1-2 Senior Rodeo, El Paso, Texas.

2 St. Stephen's Day, Acoma, New Mexico. Leave Highway 66 at Paraje, 53 miles west of Albuquerque; drive 15 miles to Acoma.

2-3 Duchesne county Stampede, Duchesne, Utah.

6-7 Peach Day at Brigham City, Utah.

7 Reenactment of discovery of Grand Canyon at Discovery Point, South Rim. Five-scene pageant. This special Coronado Centennial feature originally scheduled for August.

10-12 Cache county rodeo, Logan, Utah.

11-12 Galena Days celebration, Bingham, Utah. Dale Johnston, chairman.

12-14 Annual rodeo, Vernal, Utah, Alvin E. Weeks, president.

12-15 Nevada livestock show and Elko county fair, Elko. Donald Drown, secretary.

15-16 Mexican Independence Day celebration, Phoenix, Arizona.

20-22 Navajo Tribal Fair at Window Rock, Arizona, featuring a pageant of eight episodes during the American era. Earl L. Raines, Fort Wingate, director; Tom Dodge, announcer.

22-29 New Mexico state fair, Albuquerque.

24-25 Archdiocesan Council of National Council of Catholic Women, Clovis, New Mexico.

25-28 Bi-State Fair, Clovis.

27-28 New Mexico State federation of labor convention, Clovis.

27-29 Antelope Valley Fair, Lancaster, California.



Volume 3

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"Desert Mystery"

'Twas the mock, majestic motion
Of the desert dunes that gave
The essence of the ocean
To the lonely desert grave.

Like a mast, bizarre and broken,
Of a ship without command,
The cross, a weathered token,
Stands guard upon the sand.

Like a ghost-ship through the ages
Sails this derelict of doom,
While constant battle rages
'Tween the desert and the tomb.

What a wonder that the thunder
Of the wind in all its haste
Has not torn the cross asunder
From the grave beneath the waste.

Yet, the cross today is standing
For the eyes to gaze and see—
A spectral mate commanding
A desert mystery.

BY GEO. MORGAN
Brawley, California



Desert Miracle

BY GEORGIA SUMNER WOODRUFF
Los Angeles, California

The Great Spirit walked the sand last night,
The swish of his robes on the sage I heard;
And I heard the plaint of a whip-poor-will
When the great white moon came over the hill,
But the voice of the wind in the pass was still,
Waiting the Spirit's word.

The desert in breathless quiet lay,
But a perfume rose as the Spirit passed,
Like breath of verbenas and cactus bloom,
Or freshness of rain in the sudden gloom
That falls where palm fronds vaguely loom,
Or the smoke tree's eerie shadow is cast.

All night long the mystery
Veiled the quiet desert land.
But, lo! When the morning was rosy red,
And the purple shadows of night were fled,
A Persian carpet of bloom was spread,
Where the Spirit had walked the silver sand.

TRAILS

BY MARION WELLS DAVIS
Mesa Grande, California

The trails I love are green and darkly cool
Bright darting sunlight plays on shaded pool.
A throbbing pulse across the canyon thrills
The voice of pine trees swaying on the hills.

The trails I love hide deep in desert lands,
Where solitude and death with thirst join hands.
The naked rattler glides in sullen haste
Across the tortured cactus-covered waste.

The trails I love are narrow, steep and sheer,
The towering snow-capped peaks are strangely near,
The eagle circles over mountain crest,
Its eager, watchful eye on hidden nest.

The trails I love are dim and thick with grass,
The grazing cattle watch me as I pass.
My swiftly running horse across the plain
Brings whistling wind that sings a wild refrain.

The trails I love lead up through rain-swept brush,
My horse's hoofs the April wild flowers crush.
The lure of scented sage-brush fills the air,
The magic spell of Springtime ever fair!

DESERT HILLS

BY ALICE FOWLER
Hollywood, California

In winter, when the desert hills are grey
And silent in the dusk, no softening snow
Conceals their rugged, somber lines, although
When swift the fading sun, with magic ray,
Floods earth and sky—ah, then—at close of day,
The hills, transfigured, phosphorescent glow
Like jewels. Rubies, amethysts, and lo—
Blue sapphires, dim, mysterious, they lay.

In spring, the desert hills, awakening, flare
With multitudes of iridescent bloom.
Blue lupin, flaming poppy, prickly pear,
Wee golden buttercup and yellow broom—
A riotous display-blend everywhere,
Like ancient hangings from a Persian loom.

For more than 10 years Chief Cochise of the Apaches outsmarted and outfought the entire Army of the West. He had vowed to slay every white man who crossed his path. And yet Cochise, for all his savagery, had a code of honor. To him, a man's word was more sacred than his life. Here is a story of one of the bloodiest episodes in the history of the Southwest—for which the white man, no less than Indian, was responsible.

'Cochise no Take Cattle!'

By SHERMAN BAKER

A cold wind was blowing down from the lonely summits of the Dos Cabezas, and there was a faint haze of snow, like a lace mantilla, over the peaks of the high Chiricahuas to the southeast. Inside the white soldiers' tent on Apache pass, in Arizona, in February, 1861, Chief Cochise squatted, listening to the young U. S. army officer accuse him of stealing cattle. Flying overhead was the time-honored, universally-respected flag of truce. The Indian's cleanly-chiseled features were like the hard granite rocks strewn along the pass. When the white stopped for breath, Cochise spoke, for the first time.

"Cochise no take cattle!"

"You lie!" shouted the officer. "You and your dirty tribe are lying! Tie him up, Sergeant!"

Quick as a striking panther, the Indian chief was on his feet. He drew a long-bladed knife, and slashed the tent cloth. He stopped, just long enough to speak again.

"Cochise no lie! Kill white man, now!"

Then the Indian darted out of the camp. The sentries fired quickly, and Cochise staggered for a moment, but soon gained refuge in the high rocks among his braves. His fellow chieftains at the peace council, less agile than Cochise, tried to follow their leader, but were overcome and held captive.

Chief Cochise, whose code of life was honesty and plain-speaking, had heard of the long history of the white man's perfidy and treachery toward the Indians. He had heard older warriors whisper sinister tales of peace councils where the white man fed the Indians strychnine in the food, or where the whites concealed heavily-loaded howitzers behind the feast tables. Now with his own eyes he had seen the white man's dishonesty and treachery.

High up among the lonely rocks that night the cold light of the Arizona stars fell upon a strange ceremony. Cochise was swearing vengeance against the white man. In silence he flung his war-turban on the ground. Grim in their fresh war-paint, the Apache warriors circled around it slowly, chanting an age-old Athapascan war song. With the muzzle of his carbine Cochise raised the turban toward the flickering stars. Then he bound it around his head, swearing that the turban would never be removed except in death. Cochise was on the warpath.



COCHISE

Etching from Cozzens' "The Marvelous Country"

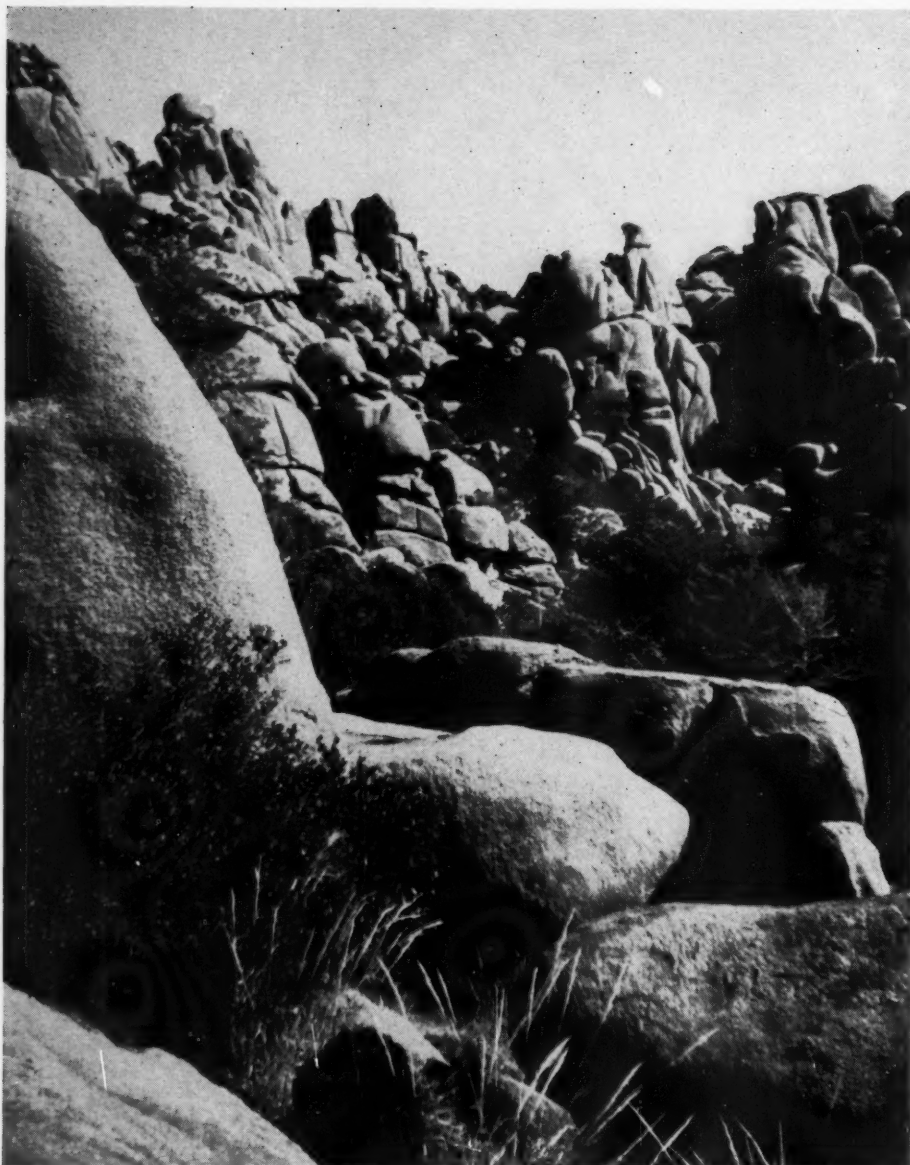
Chief of the Chiricahua Apache Indians, he stood six feet in his antelope skin moccasins. He bore himself straight as a yucca stalk. Wiry and muscular, he walked proudly, as befitted a hereditary chieftain of the bravest of all the fighting tribes of American Indians. His dark face was dominated by a fine aquiline nose. His intelligent black eyes were deep-set, and the skin was drawn taut over very high cheek-bones, and sharply-jutting jaws. His dignity, his simple courtesy, his fierce, eagle-sharp eyes, all proclaimed the proud, brave warrior — the leader of fighting men.

Cochise was born about 1813 near Pinery canyon in the Chiricahua mountains of southeastern Arizona. His name is frequently mispronounced. It is spelled in early accounts "Cheis," or "Cachise," and should be pronounced "K'chice" to rhyme with "police."

Before he was unjustly accused of stealing cattle, accused of lying, and saw the sacred flag of truce broken by the white man, Cochise was the Americans' friend. But after the incident described above, Cochise vowed a war of extermination, and became the bitterest and most ruthless enemy the whites ever had. For years, until near the close of his life, he harried the whites, butchering every American who came within his grasp.

The character of Cochise, unlike that of most savages, was complex. He was intelligent, but at the same time emotional; he was superstitious, but he could also scorn superstition when it was for the good of his tribe. Perhaps the best evidence of his superior mentality was that for years he outsmarted and outfought the most competent Indian fighters the United States army could send out after him. He was so superstitious that he would never allow a photograph to be taken of him.

One night shortly before his death—he was then at peace—an American walked between the great chief and his camp.



Entrance to Cochise's stronghold high up in the Dragoon mountains of Arizona. This is typical Apache country.

fire. Cochise sent one of his sub-chieftains to request the white man to return the same way and pass on the outside of the fire. Cochise, like all Apaches, believed that it was an omen of death to pass between a sick man and the fire that gave him warmth.

The rugged, towering pinnacles of the area in the Dragoon mountains known today as Cochise Stronghold, were considered by the Apaches as the sacred abode of the dead, and were carefully avoided. Faced with changing conditions that required new tactics of warfare, Cochise overcame his own superstition and that of his tribesmen, and utilized the natural fortifications of the Stronghold as a refuge and as a headquarters.

The great chief loved and hated fiercely. He would drink and beat his wives. To his death he carried on his right hand deep scars made by his younger wife, who bit him in a jealous rage. He had

the true Apache belief that pity should have no place in the Indian breast. But when he tortured a Mexican near Agua Prieta, he suffered remorse the rest of his life. The Mexican was pegged out over an anthill, with a trail of honey leading into his propped-open mouth. But Cochise could not enjoy it. The screams and groans of the victim became a cruel punishment to him, and for years afterwards he sweated in agony of mind over this torture.

Cochise was a philosopher and an orator. His religion was truth and loyalty. Like all Apaches, he had a supreme respect for his word. No untruth ever passed his lip—"A brave man never lies," he once said to his only white friend, Captain Jeffords, and it is a phrase that may be used as a motto for his life. He lost all respect for white men after they lied to him and accused him of lying.

His speech at the Canada Alamosa

council in 1871 struck deeply into the hearts of all those present.

"When I was young," Cochise said, "I walked all over these valleys and these mountains, east and west, and I saw no other people than the Apaches. After many summers I walked again, and I found that another race of people had come to steal our land, kill our game, and poison our water. How is it? The Apaches were once a great and proud race; they held their heads high and were afraid of no man. Now they skulk and hide like the cowardly coyote. The bravest have been killed in battle. Tell me, if the Virgin Mary has walked throughout all the land, why has she never entered the lodge of the Apache?"

Chief Cochise was considered one of the most remarkable military tacticians the army had to contend with. From his carefully-guarded secret stronghold high up in the twisted rocks of the Dragoon mountains in Arizona he would send small bands of picked warriors to kill the whites, plunder wagon trains, steal guns, ammunition, cattle and horses. Sharp-eyed lookouts, coded smoke signals that could be seen a hundred miles, and swift messengers kept him in constant communication with his raiding parties.

Attacked from Ambush

Realizing that guerilla warfare was his only hope, he rarely attacked in the open, and seldom menaced troops on the march or large bodies of well-armed citizenry. At some rock-strewn, lonely pass, or at some sycamore-shaded ford, his dark warriors, camouflaged with twigs, brush and dirt, would ambush small companies of settlers, or lightly-guarded wagon trains. They would kill every person, loot, and burn the wagons—all with little or no loss on the part of the Indians.

Or, some black night, his turbaned troops would creep up to an isolated ranch or mining camp, kill and scalp every living person, destroy the crops, drive off the cattle and horses, and race back into their mountain fastness, safe from all pursuit.

One day a lone white man rode into Cochise's secret stronghold, dismounted before the amazed warriors, handed his weapons to a squaw, and coolly went up to Cochise. It had been many years since any white man had come into Cochise's power and escaped alive. For a time the two men looked each other in the eye in silence, as was the Indian custom. Then they sat down together and talked. The white man was Captain Thomas Jonathan Jeffords, an intrepid, red-bearded frontiersman employed in carrying fast express over the old Butterfield stage route. He had buried 22 riders in 16 months, and realized that he could not keep on unless he came to some understanding with Cochise. Jeffords stayed several days in the Indian camp, and finally completed a private treaty with

the great Apache—a treaty without equal in the annals of Indian warfare. Cochise admired Jefford's courage in coming up alone to see him, and they became loyal friends. Later on, by the Apache ritual of drinking each other's blood, they became blood-brothers.

After the Civil war the troops were sent back to Arizona in great numbers. They hunted Cochise like a lobo wolf, but like the killer wolf himself, the Apache was too cunning for them. His braves continued their war of pillage and terrorism.

About 1871 the Apache troubles were at their climax. Trained scouts, often Indians themselves, aided the army's best officers. But there was neither telegraph nor railroad, and the soldiers, encumbered with heavy equipment, moved slowly. In contrast Cochise's raiders traveled light and fast. They could pick their way, unseen, from 50 to 75 miles a day on foot over the roughest country, eating nothing but a handful of pinole meal. It was a war of attrition and logistics.

Canteen 40 Feet Long

Cochise adopted a device that made his war parties nearly independent of the soldier-guarded waterholes. When the Apache braves had ridden a horse almost to death, they would slaughter it and eat it. But they were careful to preserve the small intestine. This they would clean out and fill with water. Thirty or forty feet of it would be wrapped around the body of a led pack-horse. This rude canteen would contain enough water for a band of raiding Apaches for many days.

Cochise also used the disconcerting method of striking simultaneously at points far apart. Tucson itself was attacked. Lieutenant Cushing, the army's crack Indian fighter, was killed, and his force nearly wiped out by Cochise, at Bear springs in the Whetstones. The great Apache was bringing the United States government to terms.

The Navajos had been subdued, the other Apache tribes were being guarded on reservations; all that remained free were Cochise's fierce Chiricahua fighters. But the government could not even get in communication with the hostile chief. Finally General O. O. Howard was sent out by the president of the United States as a special ambassador, with power to make a treaty with Cochise. Through Jeffords, Cochise's white blood-brother, General Howard located the great warrior, and talked with him—in the same secret headquarters in the Dragoons. Cochise said:

"Nobody wants peace more than I do. But my people are free. They want to come and go like the wild deer. They cannot be herded upon a far-off reservation, like tame horses in a corral. Give me as a reservation these mountains where my people first saw the sunrise.

Give me as agent my blood-brother Jeffords. Take the soldiers away. Upon these terms I shall make peace, and keep peace. I shall keep the roads open, I shall punish marauders, and I shall keep the peace in my lands."

General Howard remained in the Apaches' camp for 11 days, while the sub-captains of Cochise came in for a great council. Cochise and his chiefs consulted the spirits of their fathers. On a plateau high up on the mountain there came a moaning as of a low wind. Howard was invited to the council circle. The spirits were favorable. As the dying sun stained the gaunt rocks of the Dragoons

with its blood-rays, Cochise spoke again:

"Hereafter, the white man and the Indian will drink of the same water, eat of the same bread, and be at peace."

Cochise, the greatest of all the western Indians, kept that peace the rest of his life.

Some months before his death, Cochise suffered from a painful intestinal malady. Captain Jeffords was with him as he approached the end, gave him medicine, and watched with him. The evening before the great chieftain's death on June 8, 1874, Cochise spoke farewell to his white brother.

"Brother, I think I shall die, at 10



Nachise, younger son of Cochise, and his wife. Photo, U. S. Army Signal corps.



One of Cochise's wives. Photo, U. S. Army Signal corps.

o'clock tomorrow. Do you think we shall ever meet again?"

"I don't know," replied Jeffords. "What do you think about it?"

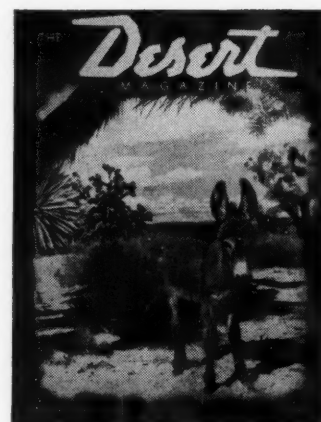
"I don't know, Brother. It is not clear in my mind. But I think so, up there!" The Indian pointed his hand at the great blue vault above them, and they parted, wondering, both of them, at the sempiternal mystery that none has solved.

Cochise died at 10 o'clock the next day, as he had predicted. Before he died, his braves carried him up into the lonely, weirdly eroded granite rocks of the Dragoons so that he could see the sun rise over his native Chiricahua mountains. Somewhere in the Dragoons he was buried according to the Apache custom, his

face forever toward the rising sun, forever toward the Great Giver of Life.

No one knows just where his grave is. Some say he was buried at the entrance to the East Stronghold canyon, and that his warriors rode their horses up and down all that day, all that night, and all the next day, the horses' hoofs obliterating all trace of the burial place. Some say that he was lowered into a fissure or ledge in the great rocky cliffs of his mountain stronghold. Jeffords was the only white man who knew where Cochise was buried, but Jeffords remained faithful to his blood-brother all his life. The secret has died with him, and Cochise, greatest war-chief of the Apaches, sleeps in silence, alone and in peace.

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THE Desert MAGAZINE

636 State Street El Centro, California

The DESERT MAGAZINE

Ella Pitcher has lived more than 40 years in the little desert town of Barstow—"and there hasn't been a dull day in all that time" she'll tell you. If folks who live in the "more cultured" regions wonder how anyone could be happy for 40 years in a frontier settlement, here is one woman's answer.

Barstow's Big Sister

By CORA L. KEAGLE

"REMEMBER I didn't say I was the oldest person in Barstow, just the oldest inhabitant," challenged Ella Pitcher, known for over 40 years as "big sister" to the town of Barstow, out on the Mojave desert in California.

Mrs. Pitcher is big only in her civic endeavors and her philanthropies. Physically she is a small person. Curled up on the corner of a couch in her living room, she sat on one foot in a little-girl position as she related some of her early experiences on the desert. Her face glowed with animation as she related one interesting episode after another.

"When I came here as a young girl in 1896, to visit my brother who was road master for the Santa Fe, there were only 50 people in the settlement, just a little cluster of houses down on the flat by the river. That was years before Charley Williams homesteaded a patch of sage brush up here where the town is now.

"There were no paved streets in those days and no refrigerators nor house coolers. We cooled our water in a Mexican olla with a sack around it, suspended where the wind could blow on it. Our food was kept in a cooler made of gunny sacks stretched over a frame. Flannel wicks from a pan of water on top, kept the sides wet.

"Desert sand storms had a clear sweep. So much sand collected on the cloth ceiling in my brother's house that it sagged down in the center. I couldn't stand that. I sent to San Bernardino for muslin and wall paper, tore out the old ceiling and lined and papered the house myself.

"Fresh meat came in from San Bernardino once a week but the Chinese who cooked for my brother was more of a shovel hand than a chef so it was hard



Ella Pitcher has spent 40 years of her life on the Mojave desert.

to tell whether the meat was fresh or not.

"I had been here only a short time when Mrs. Wash Cahill gave a party. That was the first time I met Ed. Pitcher. He was a mighty good looking fellow I thought, but he had a girl with him and she was pretty snippy to me all evening. Being accustomed to having my own way I made up my mind then and there, that

I'd take Ed. Pitcher away from her just to show her I could.

"Later when Ed. asked me to go out with him, I went more for spite than anything else. But the more I saw of him, the better I liked him. One day we were both invited to a swimming party. I borrowed a bathing suit, one of the awful things they wore in those days. It was much too large and so generally unbe-

coming that I hoped Ed. wouldn't notice me among all the others but he did and it was on the way home that he proposed.

"At that time he was driving one of the big 20-mule borax teams. For 10 years he had been considered one of the best drivers. But a railroad was built up Borate canyon to haul out the borax so Ed. went to work for the Santa Fe railroad in the round house there.

"When he left the railroad he was elected constable of Barstow and appointed me as his deputy."

It was amusing to visualize this little lady as a deputy constable in a mining country in early days but perhaps her courage compensated for her small stature.

"Finally Ed. resigned. The reason he gave was that he just couldn't stand to hear the prisoners at twilight singing, 'Silver Threads Among the Gold' and 'Break the News to Mother.' He didn't know the prisoners told each other that when Ed. heard these songs he would forget to turn the keys in the locks."

The Pitchers acquired the Inez hotel, then the swankiest place in Barstow and as hostess Ella met many notables, among them the Prince of Belgium, Teddy Roosevelt, General Pershing, Champ Clark, President Taft and Governor Stephens.

Among the old-timers at Barstow she was rated the best cook in the place as well as the best dressed woman west of Albuquerque. She assisted her husband, was a licensed realtor, worked for woman's suffrage, found time to act as United States census marshal in 1900, 1910 and again in 1920. In an old Barstow paper I found this paragraph: "Women now sit on the jury in California and five other states. Tuesday Mrs. E. L. Pitcher had the honor of being the first lady to perform jury duty in Barstow. She did it gracefully."

During the World War she was president of the local Red Cross and at the end of the war won the highest award given by that organization, the four-stripe badge. As chairman of the Council for Defense she sold over \$50,000 worth of Liberty bonds and \$6,000 in stamps, winning a bronze medal from the Federal government for patriotic service. She served as Food Administration chairman for the desert side of San Bernardino county.

With her war duties over she was elected in 1922 to the first presidency of the Barstow Women's club and wrote its constitution. She is now a life member without dues, and Mother Emerita of the club.

She particularly prizes a card showing membership in the Barstow chamber of commerce. Exhibiting the card she said with a chuckle, "There's a story back of this. Years ago I became interested in the

work being done by the chamber of commerce and offered to join it. The chairman looked me over, then said that he didn't consider women capable of doing the kind of work they were doing. That was the first time I had ever been refused membership in anything and I didn't forget it.

"Shortly after that the chamber of commerce invited Governor Stephens to come to Barstow to speak. There was a big banquet the night before the governor was to arrive and the next morning the members of the chamber of commerce who were to meet him were still in bed when his train pulled in at the station. There was no one to meet him. I heard he was in town, found the governor and took him in my car to the school house where the meeting was to be held.

"So the chamber decided I was eligible for membership. Governor Stephens sent me this autographed photograph and a letter of thanks for rescuing him."

In talking with Ella Pitcher's friends in Barstow I learned that in addition to the many civic duties she has carried on, she has found time to raise 21 relative

children, including four who were with her at the time. And "she's a real mother," one of her nieces confided to me. The truth is she has been a "mother" to the ill and needy of Barstow for more than 40 years.

Life in a frontier town is not all sunshine. For three years Ella Pitcher was totally blind—until an operation restored her sight. Then came the death of her husband. She remembers him as a fine companion who was always doing things to make her laugh.

Ella doesn't laugh so much now, but there is always a smile as she carries on, doing whatever task is at hand.

Her latest interest is in her work as chairman of a committee on programs for the blind, an activity of the Women's club. "Perhaps I understand the need for this work better than those who have always had their sight," she explains.

Forty years in one desert community is a long time—but there hasn't been a dull day in all that time for Ella Pitcher. "Wherever you live, you get out of life just what you put in it," she explains.

Sez Hard Rock Shorty of Death Valley . . .

By LON GARRISON



"Well," said Hard Rock Shorty as he took off his shoes, propped his feet on the rail of the store porch and wiggled his toes luxuriously through the holes in his socks, "in spite o' what it said on the radio I still maintain it can be did on account o' because I've saw it."

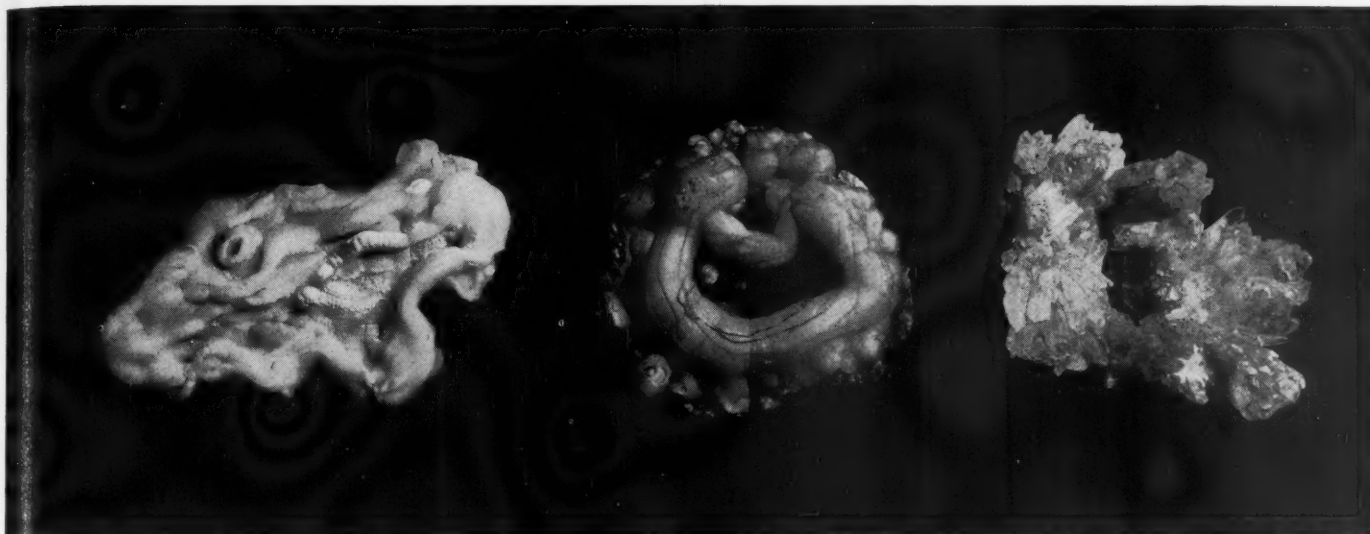
He yawned widely, bit off a chew of cut plug and ruminated for a few minutes.

"Yup. This desert heat can be hitched up an' made to do things. Here about 40 year ago Pisgah Bill had 'er all figgered out. He had a mare called Nellie he drove hooked up to a old democrat, an' he rigged up a sun shade over Nellie to keep the sun off. He had a long frame runnin' over her back from up by her ears clean back to the seat. He nailed a piece o' canvas over this an' then he found out that the hot air risin' from the ground actually sort o' lifted Nellie up a bit an' she couldn't get no foothold.

"So Bill bein' a old sailor, just rigged the hind end o' this sunshade higher'n the front, an' then

the lift pushed a little too. Old Nellie'd trot along in the shade with nothin' to do but hold back a little sometimes, an' the breeze keepin' 'er cool as a eskimo. Finally Bill built the thing over so it'd lift Nellie clean off the ground, an' he even rigged up a little sail on the front seat to steer with. He sure looked funny the first time he come sailin' into town that way. He floated up besides the porch here, twisted his sail around just so, pulled a little puckerin' string on the sunshade to let the heat out of it, an' settled down as easy as a feather bed. Yes sir—it was real neat!

"But he had Nellie parked in the shade while he explained it to us, an' when he went into the store he forgot to unpucker the string again. He was gone longer'n he figgered an' the sun got around there. When Bill come out o' the store, there was his little wagon an' Nellie, way up in the clouds an' headed out acrosst the mountains—purty near out o' sight. Bill had to walk plumb to Reno, Nevada, to get 'em back."



These two "chalcedony roses" were picked up on the Turtle mountain trip. The specimen on the right is a cluster of the tiny quartz crystals found near Moabi spring.

Miles and Miles of Chalcedony

By LOUISE EATON

AN old prospector first told me about the Turtle mountains and the gem material to be found there.

"You'll know the place when you reach it," he assured me. "Follow the Los Angeles road from Desert Center to Vidal junction. You'll see Moabi peak off to the northwest—sticking up like a sore thumb. That's the landmark of the Turtle mountains—and there's agate and chalcedony scattered over the mesa for miles around there. Maybe you'll find a specimen of carnelian."

Other old-timers of the Southern California desert confirmed the report. Chalcedony roses were plentiful they said — and if I followed a certain canyon I would reach Moabi spring — an oasis with palm trees.

And so, on a cool April morning the Eaton family took the highway that leads through the melon and flax fields of Imperial valley and along the Salton sea toward Mecca and Desert Center. From Mecca we took the Box canyon road — the old oiled highway that becomes a headache to the state highway department whenever a cloudburst visits this region.

Box canyon is a devil's trunk-room-sort-of-place. The deeply eroded hills are

composed of uplifted sedimentary sandstone with occasional patches of slate and clay. The colorful strata lie at many different angles, as if the huge slabs had been piled up by some prehistoric giant in an effort to build himself a very unconventional rock garden.

Beyond Shaver's well the road winds up, out of the arroyo to a desert plateau that was a luxurious mass of color. The dry washes were golden rivers of palo verdes in full bloom, with lavender islands of ironwood. Verbena and prickly poppy were scattered in profusion with encelia, lupine and geraea. The sky rockets of the ocotillo were just bursting into flame. If the desert was always as green and colorful as on this April day in 1940 — it would no longer be a desert.

At Desert Center we took the long lonesome pavement that follows the general route of the aqueduct toward Rice and the intake above Parker. The Metropolitan district built this road for just one purpose—to haul machinery and men in and out for the construction water line. It is a fine example of the geometrical principle that a straight line is the shortest distance between two points, and it is never over-crowded with traffic. There are dry lakes along the way, where

dust devils twist and turn in their fantastic dances.

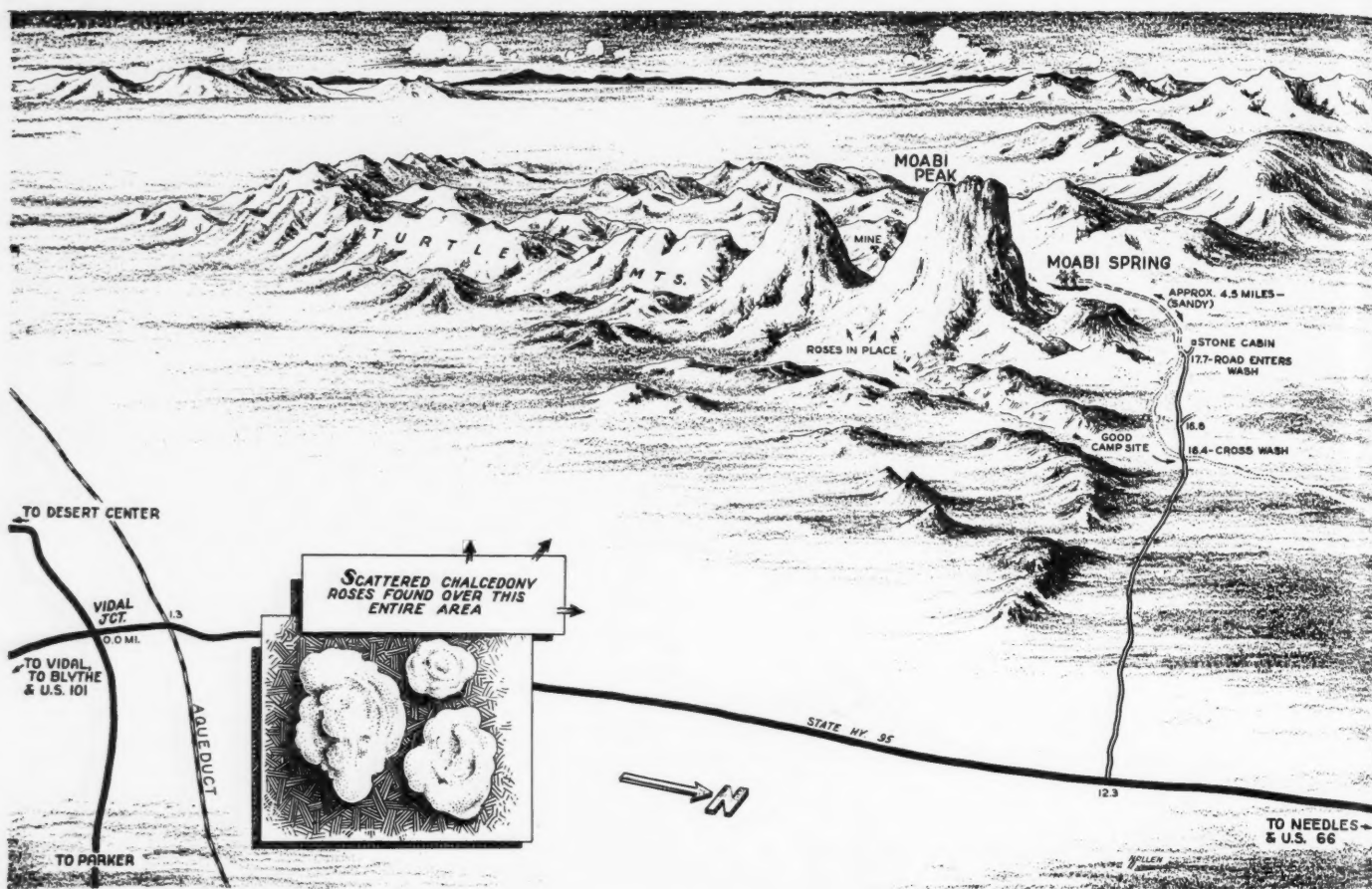
At Vidal junction we set the speedometer at zero. Here the Blythe-Needles highway crosses the Desert Center-Parker road—and that is the reason for two service stations and a state inspection garita. All cars from the east and north must be inspected at Vidal junction for bugs, and whatever else the quarantine officers think might be injurious to the sovereign state of California. Water is scarce here and must be hauled from a pumping plant along the aqueduct.

Russell Travis at the Standard station invited us to see his two-weeks-old baby. The infant proved to be a wild burro not yet old enough to nibble grass. It was Travis who gave us definite information about the area where we would find chalcedony and agate. Also about the spring where the palm trees are growing.

We took the Needles road out of Vidal junction and crossed the aqueduct at 1.1 miles. Here we entered the chalcedony field. We found some pretty orange colored pieces near the aqueduct, although the supply is not plentiful here. When polished this orange chalcedony is exquisite, with amber stripes in transparent waxy white stone.

After a few curves the pavement

The summer recess in gem and mineral collecting on the desert will soon be over. The cool days and crisp nights of the fall months will invite weekend camping trips. Here is a chalcedony field easily accessible to California and Arizona motorists — a place where literally hundreds of square miles of desert mesa are sprinkled with wax-like "roses" and where the nearby hills include many kinds of minerals that will interest the geologist and collector.



straightens out and extends ahead apparently without a turn to the far horizon. The Whipple mountains are on the right and the Turtles on the left. There is much prospecting in this region but few paying mines, although one miner is reported to have been offered \$50,000 for his claims.

The hills are steep, difficult of access, nearly waterless and quite woodless. Moabi peak dominates the Turtle range. It is a stubby pinnacle and the sides appear almost perpendicular.

At 12.3 miles from Vidal junction we turned left on an ungraded desert trail. The only marker at this point is a board stuck upright in a small rock cairn. We scouted both sides of the road for chalcidony, and found it everywhere. It may be picked up along the main highway for a distance of 20 miles, much of it in the form of dainty roses.

Our trail took us directly toward the Turtle mountains. Great black patches appear on the hillsides, and later when we investigated we found the black to be sunburned igneous rock and basaltic lava.

Our trail was surprisingly good, although somewhat rocky in places. Three miles from the highway we thought we saw a dam in a narrow gorge between two hills. We left the car for a closer look—and the "dam" turned out to be a mass of conglomerate which at one time had formed a cave, and then fallen in. On the way we crossed a well-defined

foot path, probably of Indian origin as we came across a handful of agate chips which might easily have been flaked off in the making of an arrow or spearhead.

Plenty of Wood for Camp

We were going in the general direction of Moabi peak. At 16.4 miles the road dipped steeply into a wide dry wash. It is a good campsite with an abundance of wood—but no water. After crossing the wash the road veers to the left, apparently headed for a canyon which passes north of Moabi peak.

At 16.7 we parked the car while Arthur hiked up a big canyon on the left side. We were looking for the source of some of the rocks we had found on the floor of the desert. Travertine is much in evidence here, both in the sandy banks of the arroyo and on scattered rocks. Many pieces of chalcidony were also seen on the higher levels.

At 17.7 miles the road dips down into the canyon, and here we parked our car at what might have been the remains of an old stone cabin. Two walls are standing and would provide some shelter for a camper, but the previous occupants were too untidy with their tin cans and trash to make it an inviting spot for folks who like the desert natural and clean.

Crude printing on a wooden box lid informed us that there was water four miles up the canyon, but when we scouted the trail in the bottom of the sandy

wash we decided we would attempt to go no further in the car. Some one had attempted it—and holes and mounds of sand along the tracks indicated they had done considerable excavating before they got out. At certain seasons, however, this canyon is quite passable for cars.

We pulled down along the arroyo and made camp—and those steaks broiled over an ironwood fire would make a rock collecting expedition a success—even if there were no gem rocks.

The banks of the wash here tell an interesting geological story. Under the scanty surface soil lie all the sediments of a great body of water. There are layers of sandstone alternating with strata of colored pebbles, all cemented together with intermediate layers of travertine.

We wanted to reach the spring, and were up and on our way before six in the morning. It was difficult walking in the soft sand—but not as difficult as it would have been trying to drive a car up this wash.

At one place, where a car had been stalled, I saw two inches of chain protruding from the sand. When I pulled, the prize was an unbroken watch of an inexpensive variety. The chain was rusty—but when I wound the watch it began to tick.

The walls of the canyon were lined with cliff dwellings—not of human beings but of small desert rodents. They are meticulous housekeepers. At this ear-

ly hour they had finished cleaning the debris out of their homes and were carrying in fresh palo verde twigs and blossoms. One big-eared fellow calmly nibbled his breakfast while we watched.

Wild life here is unafraid. I was as much a curiosity to the blue-green lizard as he was to me. But he scampered away when I wanted to pick him up. A mocking bird was serenading from a nearby treetop.

Moabi peak was towering over us, presenting a different aspect from every bend in the canyon. If this peak can be climbed it must be done from the south. From our view on the north the sides rose perpendicularly for 300 or 400 feet.

Four hot sandy miles—or was it forty?—took us to Moabi spring camp. It was deserted. Shaded by gorgeous palo verde trees, it should have been a lovely spot. Nature made it that way, but the pesky campers who had been here had littered up the landscape with tin cans and old shoes. I wish some of these old prospectors were better housekeepers. A stone mortar evidently used for grinding purplish ore, rested near one of the trees.

But where was the spring, and the palm trees?

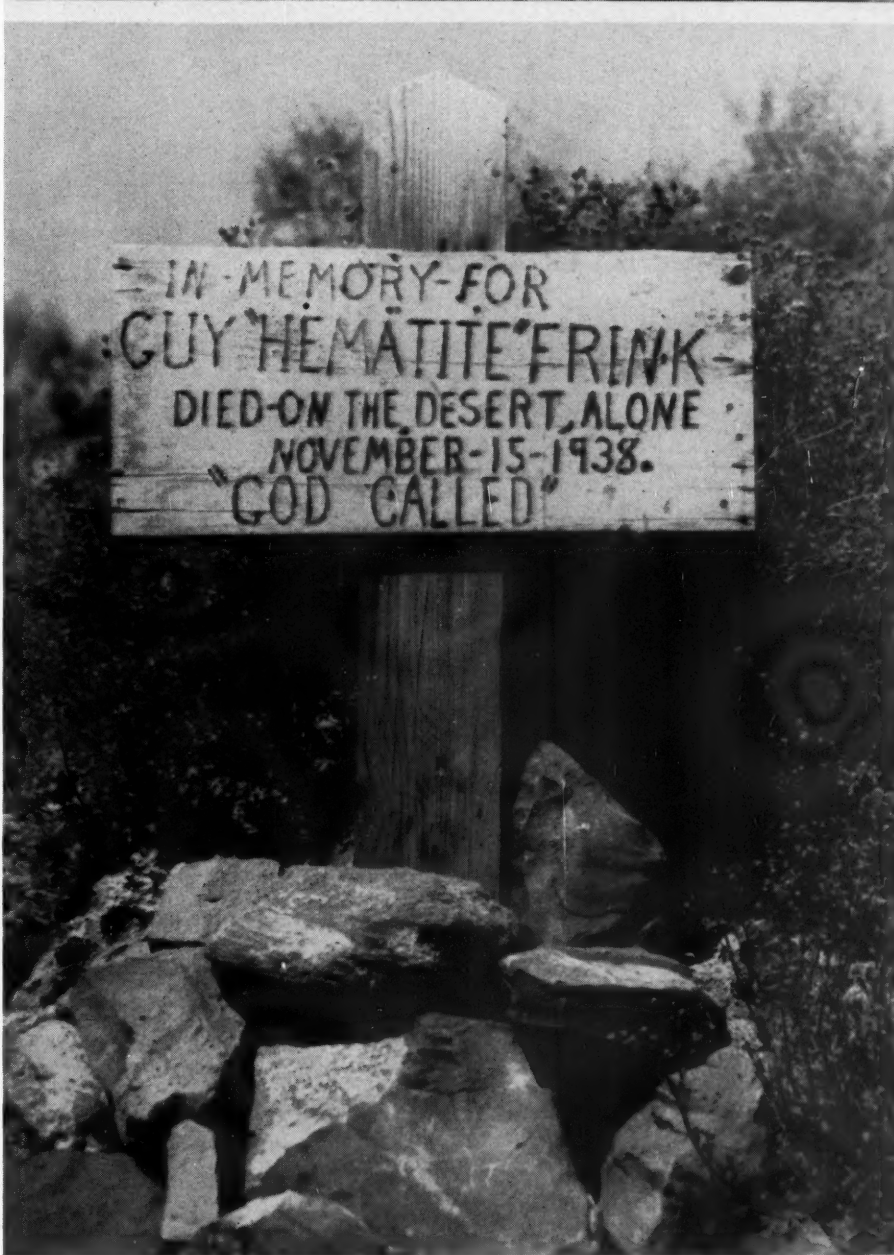
Trail Leads to Old Mine

Two trails led away from the camp. We chose the one that had been used most. It climbed steeply toward a ridge that connected with the base of Moabi peak—and eventually led to a mine, evidently the one from which came the purple ore. Arthur discovered a tiny radiate rose of quartz crystals, and when we looked further we found many clusters of these tiny transparent crystals in brown patches of rock. One minute crystal was particularly interesting—a perfect crystal with six sides and a perfect termination, but hollow—just a quartz crystal shell.

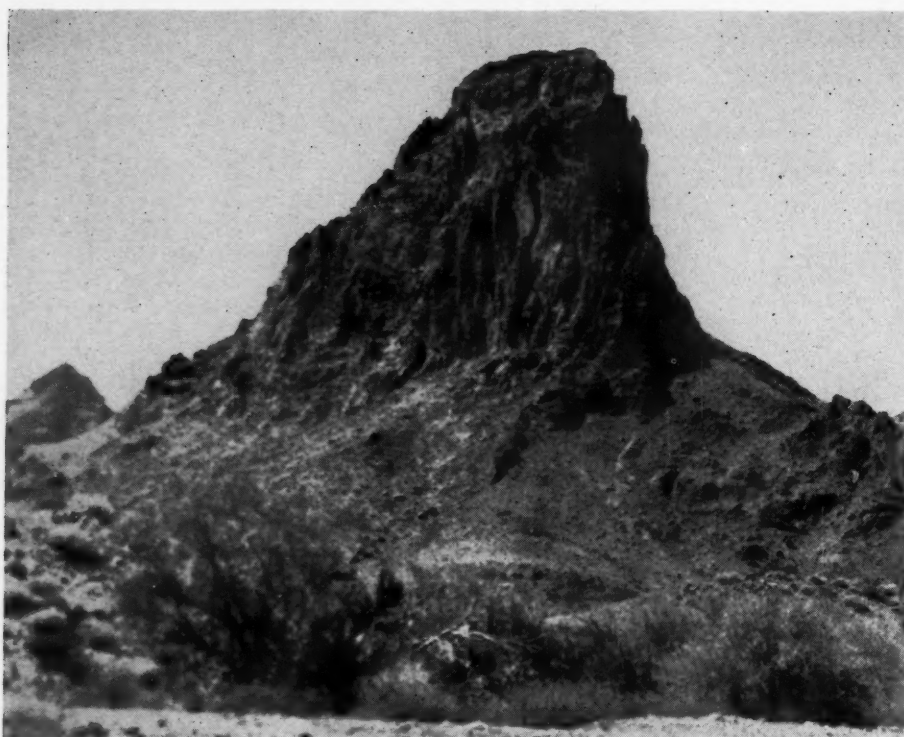
There was lush cacti on the slopes and more quartz crystals and bits of chalcedony, and we found a stratum of rock resembling dumortierite—but no spring or palm trees.

We returned down the trail, but just before reaching the foot of the hill took a fork to the left. A few minutes later we suddenly caught sight of the palms—just two of them—in a narrow canyon. And at their base we came upon a spring of clear cool water. Bare mountains tower on all sides, the desert spreads away for miles—and here in this secluded canyon is a spring that has for countless ages furnished water for the wildlife of this region—and in more recent times for Indian and prospector.

Probably this was the destination of the Indian trail we had found out on the floor of the desert. Two broken metates were near the spring. A weathered canvas shelter in a nearby glade evidently had been deserted suddenly. It was a neat



Above—Moabi oasis. The palms probably were planted by early day prospectors. Below—Guy Frink died of acute appendicitis before a doctor could reach him, and was buried near the oasis.



Moabi peak—a volcanic core. This landmark identifying the Turtle mountains, is visible for many miles.

camp, with canned beans rusting on the shelf and salt and pepper shakers on a crude table.

Later at Vidal junction we were told that three prospectors camped here a year or two ago. One night one of them failed to return to camp. Early the next morning his companions went to search for him and later in the day found him suffering from a case of acute appendicitis.

Unable to move him, they hastened to Blythe where the nearest doctor lived. When they returned it was too late. Under the palms near the spring stands a board with this inscription:

*In memory for
GUY "HEMATITE" FRINK
Died on the desert alone
November 15, 1938
"GOD CALLED"*

Along some of the ridges in this area, and on the slopes east of Moabi peak we found where the chalcedony was weathering out. Crystalline geodes and "roses" were still in place in the fissures of the volcanic rock.

It would be impossible in a day, or even a week, to determine how extensive is this field of gem material—but since literally hundreds of square miles of desert surrounding Moabi peak are sprinkled more or less with chalcedony in various forms and colors, it is quite evident the deposits have been present and probably are still to be found in place in many parts of these rock slopes and walls.

The material here has little commercial value—but it is just an ideal area for a weekend camping trip which will always yield some pretty stones for those who are interested in chalcedony. From here it is but a short side trip over a paved

road to the Metropolitan dam and beautiful Lake Havasu. And if you are fortunate enough to make the trip when the desert flowers are in blossom the outing will be doubly worthwhile.

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MANY SHIFTS IN NATIONAL PARK SERVICE PERSONNEL

Many shifts in the field personnel of the national park service were announced by Secretary Ickes during July. The changes affecting parks and monuments in the Southwest include the following:

Miner R. Tillotson, director of Region One was transferred to the same position in Region Three with headquarters at Santa Fe, New Mexico.

Col. John R. White, regional director at Santa Fe, was transferred to San Francisco in charge of Region Four.

Frank A. Kittredge, regional director at San Francisco, became superintendent of Grand Canyon.

Paul R. Franke of Mesa Verde became superintendent of Zion and Bryce canyon national parks, succeeding C. Marshall Finnan whose resignation was due to ill health.

John S. McLaughlin, assistant superintendent at Mesa Verde was promoted to the superintendency.

Myrl V. Walker, assistant park naturalist at Zion and Bryce was transferred to Crater lake. James E. Cole, ranger-naturalist at Yosemite, was transferred to Bryce and Zion.



Louise Eaton—and the wild baby burro that was "too young to nibble grass"

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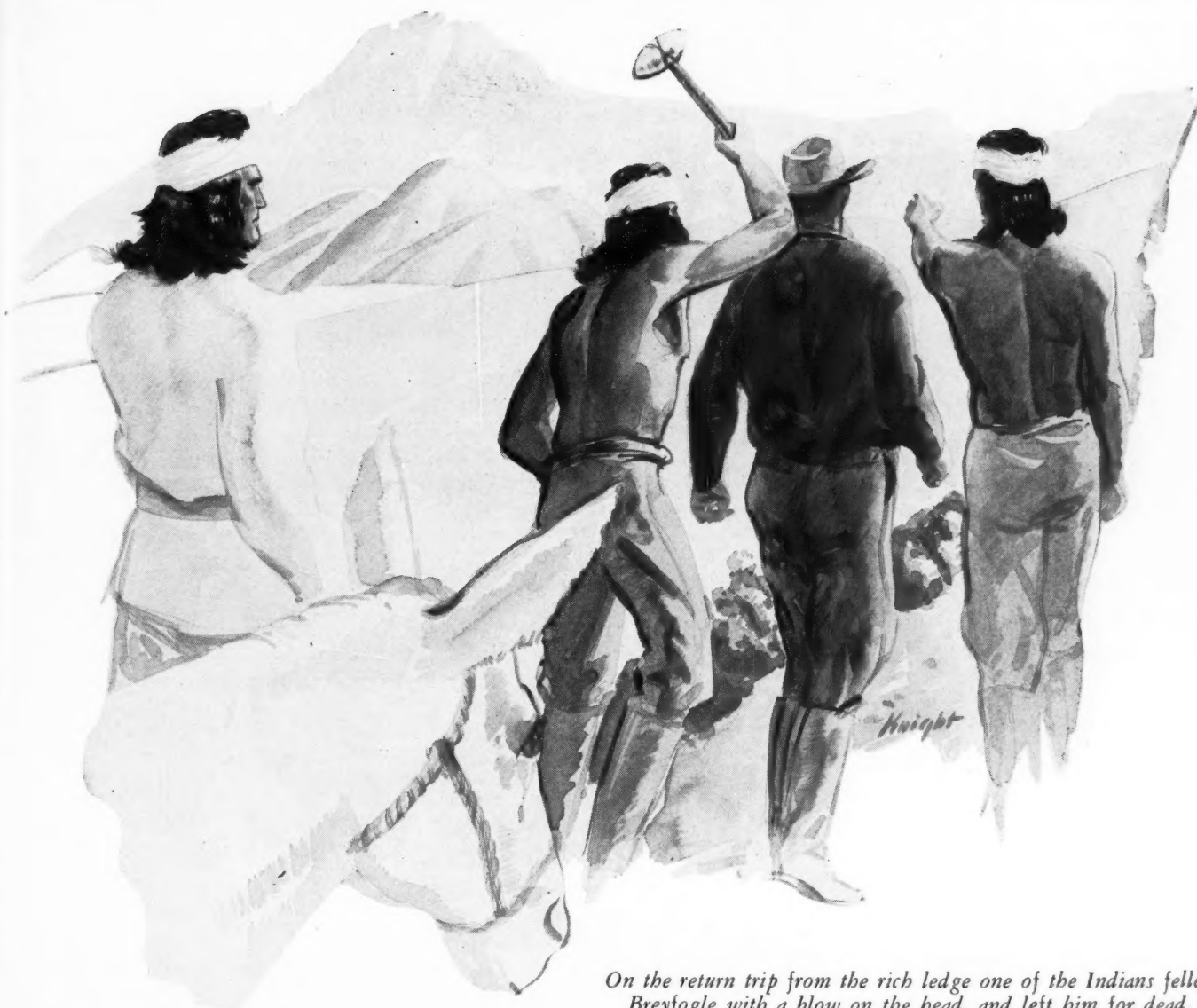
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On the return trip from the rich ledge one of the Indians felled Breyfogle with a blow on the head, and left him for dead.

Lost Breyfogle Mine

By JOHN D. MITCHELL

While many of the "lost mine" tales of the Southwest are regarded as pure fiction, there are many living prospectors who believe that the old Breyfogle ledge in southern Nevada actually exists, and that sooner or later it will be rediscovered. Many variations appear in the reports of the Breyfogle discovery. The story told here by John D. Mitchell is the most generally accepted version.

IN the early spring of 1863, three prospectors, Breyfogle, O'Bannion and McLeod, stopped at the Las Vegas ranch in southern Nevada. After refreshing themselves for a few days at the cool springs in the shade of the great cottonwoods, the three partners started out across the burning sands to the south.

Several weeks later Breyfogle returned alone. He was in an exhausted condition for want of water and was suffering from a fractured skull. In a red bandana handkerchief he carried several pounds of rich gold ore. When his wound had been dressed and he had been given food and drink he told this story:

Three days after leaving the ranch he

and his partners established camp at a small spring high up on the side of a mountain range at the end of a narrow box canyon. One day three Pahute Indians came into camp and told of a rich gold ledge about three miles away.

Breyfogle went with the Indians to see the mine and get samples of the ore. On the way back an Indian walking behind Breyfogle felled him by a blow on the head with a tomahawk leaving him for dead. Breyfogle regained consciousness during the night and made his way back to camp where he found his two partners murdered. Their small supply of provisions and firearms was gone.

Breyfogle in a dazed condition and suf-

fering greatly from his fractured skull made his way back across the desert to the Vegas ranch arriving there three days later. When he was well enough to travel he again headed out across the great desert in the direction of Austin, Nevada, where he organized several expeditions to search for the little spring and the wonderful outcropping of pink quartz. He was never quite right in the head after being struck down by the Indian and was unable to locate any place that even looked like the one shown him by the three Pahutes.

There are several versions of the story, but the most likely place seems to be in the McCullough mountains a few miles north of Crescent, Nevada. The writer stopped at the Vegas ranch many years ago and was given two small pieces of the ore left there by Breyfogle and at a small spring high up on the west side of the McCullough mountains found the ruins of a deserted camp including some badly rusted cooking utensils. Above the fireplace at the base of a perpendicular rock, in a crevice was found about ten pounds of the same kind of ore that Breyfogle had left with Mrs. Stewart at the Vegas ranch. The dim trail led out from the spring toward the northeast and evidently had been well traveled by moccasined feet. The vein has never been re-located since Breyfogle left. The samples found in the crevice above the old fireplace assayed \$6,780 per ton in gold.

Weather

FROM PHOENIX BUREAU

Temperature—	Degrees
Mean for month	91.5
Normal for July	89.8
High on July 4	113.0
Low on July 17	66.0
Rain—	Inches
Total for month65
Normal for July	1.07
Weather—	
Days clear	14
Days partly cloudy	11
Days cloudy	6

G. K. GREENING, Meteorologist.

FROM YUMA BUREAU

Temperature—	Degrees
Mean for month	91.6
Normal for July	90.8
High on July 12	116.0
Low on July 20	65.0
Rain—	Inches
Total for month	Trace
71-year average for July	0.18
Weather—	
Days clear	27
Days partly cloudy	4
Days cloudy	0
Sunshine 97 percent (423 hours of sunshine out of possible 437)	
Colorado river—	
July discharge at Grand Canyon 459,000 acre feet. Release from Boulder dam 626,000 acre feet. Estimated storage behind Boulder dam 23,910,000 acre feet.	

JAMES H. GORDON, Meteorologist.

DESERT QUIZ

One-track minds do not score very high in the Quiz published monthly by the Desert Magazine—but if you have a well rounded knowledge of the Southwest and its geography, history and the natural elements that go into its composition, you should be able to answer a majority of these questions. If you mark 10 of them correctly you are better informed than the average person. A score of 15 rates you in the class with the dyed-in-the-wool desert rats—and if you know 18 of the answers you are in that superior group, the Sand Dune Sages. Answers on page 24.

- 1—The mountain range north of Salton sea in Southern California is the—
Laguna..... Santa Rosa..... Castle Dome..... Chocolate.....
- 2—The feud between the Clanton gang and the Earps came to a showdown fight at—
Ehrenberg..... Tombstone..... Bisbee..... Prescott.....
- 3—The Yuha basin in Southern California is noted for its—
Oyster fossils..... Native palms.....
Petrified wood..... Grotesque pinnacles.....
- 4—The staple meat in the diet of the Navajo Indian is—
Beef..... Mutton..... Wild game..... Pork.....
- 5—In driving your car through heavy sand you will probably get best results by—
Letting your wife drive while you push.....
Putting chains on the wheels.....
Reducing the air pressure in the tires.....
Turning the car around and backing through.....
- 6—The notorious Indian chieftain who used the Dragoon mountains of Arizona as a hideout was—
Irateba..... Winnemucca..... Palma..... Cochise.....
- 7—The common name of the desert plant of the genus Fouquieria should be spelled—
Ocotilla..... Ocotillo..... Ocatilla..... Ocatillo.....
- 8—The man for whom the Bandelier national monument was named was a—
Trapper..... Archaeologist..... Artist..... Scout.....
- 9—The prehistoric Indian tribesmen referred to as Hohokam occupied the area now known as—
Salt river valley..... Havasupai canyon.....
Mojave desert..... White mountains.....
- 10—The famous Bottle House is located at—
Goldfield..... Panamint City..... Rhyolite..... Calico.....
- 11—The metallic name of the mineral known as Malachite is—
Copper..... Iron..... Nickel..... Silver.....
- 12—New Mexico is this year celebrating the 400th anniversary of—
Opening of the famous Santa Fe trail.....
Pathfinding journey of Fray Marcos de Niza.....
Coronado's quest for the Seven Cities of Cibola.....
Final conquering of the Pueblo Indians by the Spaniards.....
- 13—Harqua Hala mountains are located in—
Arizona..... Utah..... California..... Nevada.....
- 14—A mining location notice should be filed with—
Nearest U.S. Land office..... U.S. Geological survey.....
Clerk of the county in which the claim is located.....
Justice of Peace in the township where the claim is located.....
- 15—The infamous Mountain Meadows massacre occurred in—
Nevada..... New Mexico..... Arizona..... Utah.....
- 16—The fleetest wild animal now found in Nevada is the—
Jackrabbit..... Mule tail deer..... Antelope..... Bighorn sheep.....
- 17—The book California Desert Trails was written by—
James..... Chase..... Jaeger..... Van Dyke.....
- 18—Ubehebe crater is located near—
Death Valley..... Painted desert..... Salton sea..... Winslow, Ariz.....
- 19—To reach the famous Phantom ranch it would be necessary to—
Cross the Paiute Indian reservation in Nevada.....
Go to the bottom of Grand Canyon.....
Climb the Enchanted mesa.....
Take a trail out of Taos.....
- 20—The Gadsden Purchase was made from—
The Indians..... France..... Mexico..... Spain.....

If you visited the desert and your host served jojoba candy and tuna preserves — would you know what you were eating? Probably not, unless you were wise in the ways of the ancient desert Indians. Well anyway, here's the answer. These two delicacies of the desert are a part of the regular menu at certain seasons of the year on Ghost mountain. Marshal South will tell you about them in this month's Desert Magazine.

DESERT DIARY

By MARSHAL SOUTH

August at Yaquitepec

WE have had a grand thundershower. At a long last the rain gods suddenly remembered Ghost mountain and trailed a veritable downpour across our thirsty roof. These desert thunderstorms are always thrilling. Especially when they come at night, as this one did. Here on the bald mountaintop the electric display is terrific. We have our iron roof well grounded with wire cable, but one cannot help but feel very small and helpless in the presence of the forked streams of electric fire that split the sky from horizon to zenith. It is no wonder that all primitive peoples had a deep awe of lightning.

But the rain was a life saver. Our cisterns were down, well beyond the danger mark. Adobe construction had long since been halted. The garden, save for a few stalks of experimental corn from which we hoped to develop a desert strain of drought resistant seed, was clinging to life only by virtue of a meagre daily ration of wash-water. Water is a precious thing and even on the scanty amount which wasteland dwellers soon learn to get along with, it is astonishing what inroads just bare necessity can make in a dwindling cistern. We had begun to be seriously worried. Now, however, that is past. The storm, though short, was torrential. From our main roof we caught one cistern brim full, and several barrels from a smaller catchment area.

But there is usually a flaw somewhere in the scheme of things. This storm was no exception. It presented us with a new problem. Taking advantage of the fact that one of the cisterns had been completely emptied in the dry spell we had seized the opportunity to give its interior a protective coat of paint, which it badly needed. And, unwisely, we had used a recommended preparation which we knew nothing about.

The result was that the water from the newly filled cistern had a chemical taste and odor which had not been noticeable in the paint coating after it had dried. Here was disaster. The children flatly refused to drink any of the new catch. "Bad!" Rudyard said definitely, spitting it out. "Too much i-o-dine in that thunderstorm, daddy."

And then, out of the bleak prospect of having to lose a whole cisternful of water, I recalled something about the properties of charcoal. And we did have charcoal. There was quite a heap of it, left-over and wind-cleaned remnants from baking fires that had been swept out of our old beehive mud oven. We hunted out a big stoneware crock that we had used once for salting down meat. When it was cleaned out and filled with the odorous and undrinkable water I heaped in a generous amount of the clean juniper charcoal, covering the whole crock with a floating layer almost six inches deep. After



Here are the Souths—Marshal, Rider, Tanya, and Rudyard. The picture was taken recently among the boulders not far from the Ghost mountaintop home.

letting it stand for a day we experimented, siphoning off the clear water from below the charcoal layer.

Success! Taste and odor had almost entirely disappeared. So the cistern itself was treated with a liberal filling from the same charcoal heap. We have saved our drinking water. But it will be a long time before we take a chance again with unknown waterproofing preparations.

As a matter of fact concrete, if carefully made, needs no waterproofing. Our trouble at Yaquitepec has been that we have rarely been able to get the materials for making the walls thick enough. When the cement has to be carried up a long, steep trail on one's own shoulders there is perhaps excuse for making the cistern walls thinner than the six or eight inches that they really should be. The alternative was to coat the interior of the tanks with waterproof preparations. Out of a long list of experiments the only thing that has so far given satisfaction is a heavy asphalt emulsion. This can be applied cold, like paint, and dries out to a black, impervious, non-tasting, coating. Also the bugs don't like it and will generally give the asphalt tanks a wide berth.

The nuts of the Jojoba sometimes called also the goatnut or the quinine bush are ripe. This is the stocky little shrub with woody stems and rather large, leathery, oval shaped, green leaves. The nuts, shelled out from their covering, somewhat resemble unroasted coffee beans. A couple of days ago we went out on a gathering expedition on the south slope of our mountaincrest and brought home a quantity. The crop is variable. Some years there will be an abundance and at others practically none. Properly cured and roasted they make a good substitute for peanuts in candy. But a little caution is to be observed with the curing. There seems, just as with walnuts, to be a slightly poisonous quality to the uncured beans. At least that has been our experience with the Ghost mountain

crop, which we are now careful to cure well before using. They have one other quality too. They do not keep well in candy — not here. They are so inviting that our husky little Indians flatly refuse to let them alone. Whether made up into a clear sugar brittle or a candy of the peanut brittle type they just melt and disappear. One day the candy jar is full—the next it is empty. Rider, grinning, blames it on the hot weather. Rudyard, more plain spoken, says frankly "We just ate it all up."

Like most desert products these nuts have more than one use. The oil pressed from them was in favor with some of the aborigines as a hair tonic. On this, however, we cannot speak from experience, never having tried it. It is true that at Yaquitepec we have cast convention aside in the matter of hair styles—wearing it, as Nature intended, uncut. But we have not so far needed any tonic for it. We wear no hats and the desert sun and winds give it all the stimulation it needs.

Heat shimmers over the wastelands and thunderheads pile upon the far off crests of the Mexican sierra. Each day, almost, there is the threat of thundershowers. But often the ominous cloud masses draw in towards Ghost mountain only to be caught up and swirled into nothingness in the vortex of hot air which churns invisibly above us. It is strange sometimes to lie at noonday beneath the shade of the ramada and, staring upward at the turquoise sky, see these great threatening clouds drift in and melt. We seem to be the very center of a giant, inverted funnel of hot air which draws in from the panting wastelands, swirls up the slopes of Ghost mountain and pours in unseen volcanic eruption into the high levels of the sky. It is a hot air whirlpool in which the thunderheads, drifting in, are caught and dispersed. Slowly and ominously they churn together right above us, holding momentarily a promise of downpour. Then, discouragingly, they dwindle and fade. Soon they are gone. We find it hard sometimes, when even a light sprinkle would be a benediction upon a parched earth, to watch day after day the inexorable workings of this mighty hot air engine that functions overhead.

Rain from a Cloudless Sky

But at times we have reward in experiences that are odd. The other night, from an absolutely cloudless sky blazing with desert stars, rain fell. Not a heavy shower, a generous sprinkle of big drops only. But they banged upon our iron roof in a fashion that was startling because so unexpected. This rain freak is said to be an occasional peculiarity of Baja California. But we have had it several times on Ghost mountain. These out of the ordinary incidents contribute to the fascination of the desert.

The basket that Tanya made from braided yucca leaves for gathering tuna is empty now. But it served its purpose and bears a generous pattern of crimson juice stains to attest its honorable service. The chances are that in a very short time it will be the only visible memento of this month's fruit harvest. Like most other desert delicacies tuna syrup and preserves vanish mysteriously at Yaquitepec. And each year, as our sun-browned desert sprites grow in size and capacity, they vanish faster. Which is, of course, as it should be. What is the bounty of the desert for if not to be promptly eaten?

The fruit of the tuna cactus deserves greater popularity than it has. In Mexico it is used extensively and a variety of delicacies such as syrups and candies and *queso de tuna* are made from it. The fresh fruit is delicious, and being high in sugar content, is nutritious and well fitted for human consumption. But it is another natural food for which a hasty civilization has no patience. The old padres knew the value of this cactus. The extensive plantings of it around the Missions were not only for hedges of defense but also for food.

There is a little trouble, of course, on account of spines. But

this is easily overcome. We pick the fruit with a looped yucca leaf, dropping each fruit, as picked, into a collecting basket. When a sufficient quantity have been gathered we roll them on the gravelly soil, sweeping them to and fro with a broom of twigs or yucca. This rids the fruit of most of the tiny spicules and they can then be peeled. If care is used in the peeling one will encounter only a minimum of stickers. Divested of their thick, prickly rind the crimson-juiced fruits are delicious morsels which amply make amends for the trouble of spitting out the mass of woody little seeds they contain. The Indians frequently eat them as is—seeds and all.

For syrup the fruit is pressed in a coarse cloth, or through a screen fine enough to remove the seeds, and the juice is boiled to the desired thickness. *Queso de tuna* (tuna cheese) is merely a matter of boiling of the syrup until it cooks down to a delicious paste.

Does it store well? Yes, I believe so — in other places. But not here. The decorative properties, however, of both syrup and preserve, are some compensation for their quick vanishment. Judging by the war-paint designs acquired by our young Yaquitepecs while the tuna products last I am of the opinion that the term "red Indian" is directly traceable to the tuna.

Big--But not too Big!

Phoenix, Arizona

Desert Magazine Staff:

My name is not on your subscription list—but I am one of your most loyal readers. I've been buying every issue from the first, and I have them bound, and how proud I am to show them to visitors who come to our home. Especially easterners who wonder why we desert people become so fond of this arid region.

There's something so clean and refreshing about the Desert Magazine. It has an idealism that is so greatly needed in these tempestuous days. There are children in my home, and after we have all read the magazine we spend an evening each month discussing the things we have learned from it—not alone the facts but the subtle philosophy of sane living which you so adeptly make a part of every issue.

Oh, I wish you success. You deserve to have a big circulation. But don't grow too big. Institutions, whether business or social or fraternal, seem to become less human, less personal and less idealistic when they grow large and strong financially. Please don't ever let the Desert Magazine become that way. Keep it as it is—close to the hearts of those who appreciate the things that are true and genuine.

If you do that, your success will be greater than that of concerns which amass fortunes in mere dollars.

MRS. ELLEN W. BRODEN.

Dear Mrs. Broden:

It is needless to say the Desert Magazine staff is deeply appreciative of such a letter. We want the magazine to be just what you say it is—clean and refreshing and idealistic. They say the first three years of a new magazine are the hardest—and since we have nearly completed that three-year period without compromising our ideals—you may be sure we are not going to weaken now.

—THE STAFF.



Cloud Over Borrego

By DICK FREEMAN, Los Angeles, California

Awarded first prize in the monthly contest conducted by the Desert Magazine. Taken with a Speed Graphic camera, Zeiss Tessar 3.5 lens, 3¼x4¼. Panatomic X film pack, 1/5 sec., f22, medium red filter. Taken in May at 4 p. m. during a high wind.

Special Merit

Judged to have unusual merit: "Desert Silhouette," by Valerie von Maartens-Goetz, Hollywood, California. "Red Orchid Cactus," by Walter G. Widefeldt, Woburn, Massachusetts. "Desert Sentinels," by Dr. Will Sheffer, San Jose, California. "Cactus Blossom," by R. C. Proctor, Phoenix, Arizona.

On Guard

By FRANCIS T. COLBERT

Cowles, New Mexico

Awarded second prize in the July photographic contest of the Desert Magazine. Taken with Kodak 620, Verichrome film, f16, 1/25 second.



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ZINE



A cross-section of the Valley of Fire photographed from one of the many caves. The rocks in the background are a brilliant red sandstone—a beautiful color picture against the clear blue Nevada sky.

Flame-Colored Park in Nevada

The Valley of Fire in Nevada derives its name, not from smouldering chemicals, but from the flaming red hues of the sandstone cliffs and buttes of this fascinating region. Prehistoric Indians hunted in this isolated valley, and left their primitive art work on the rocks. In the accompanying travel sketch, Hulbert Burroughs suggests some of the interesting phenomena to be found in this Nevada state park.

By HULBERT BURROUGHS

"... Discovered by Mormons in 1865... greater part accessible only on foot or horseback... probably at one time the hunting grounds of former inhabitants of the Lost City of Pueblo Grande de Nevada... countless pictographs and ideographic writings... petrified trees... grotesque, flaming red rock forms..."

"That sounds interesting!" exclaimed Don Pierotti. "Where is it?"

"North of Las Vegas — about 70

miles," I said, still studying the map. "It's called the Valley of Fire—up near the north end of Lake Mead."

"Pictographs and petrified trees?" repeated Don—"and a lost city!" Then after a pause, "Well, what's stopping us—Let's go!"

And so we deserted Boulder dam, one of man's greatest and most modern engineering masterpieces, to seek the exciting evidence of things that transpired in the dim and forgotten past, when Nature engineered those flaming red rocks and petrified trees; when a primitive peo-

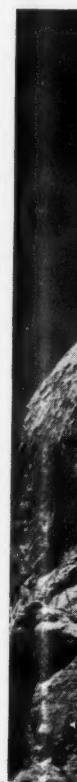
ple lived and hunted and wrote mysterious messages upon the rocks and finally died—disappeared forever from a land once teeming with life.

"Do you know," said Don as we sped north from Las Vegas, Nevada, along U.S. highway 91, "I didn't realize before what a remarkable region the American Southwest really is. Why, judging from all the ruins of prehistoric cliff dwellers and Pueblo Indians scattered all over the west, this must have been a well populated land at one time."

"But the mystery of it to me," I an-

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swered, "is why all those people rather suddenly disappeared—abandoned their cities completely. There's evidence, I understand, in some of the cliff dwellings of Arizona and New Mexico that the people left all their belongings, pottery, grain, food — left and never returned."

"Perhaps they were driven out by some other stronger tribe," Don speculated. "Or maybe climatic conditions changed—cut off their water supply."

"Possibly," I replied, "but wouldn't that have happened gradually? Those people left in a hurry!"

"I still think it must have been the climate!" Don persisted.

"Might have been; but how about that report by those two Pomona college scientists, Laudermilk and Munz, who made a study of Rampart and Muav caves up near the headwaters of Lake Mead? They studied the remains of prehistoric ground sloths that once lived in those caves. And they've come to the conclusion that the climate is practically the same now as it was then!"

Thus we argued as we approached the turn-off to the Valley of Fire. Of course our discussion had little to do with the subject of this article, but whenever one travels through the Southwest thoughts inevitably wander to the mystery of an era that once flourished and is now long since dead. Ruined cities, prehistoric

ground sloths, potsherds, pictographs.

All have a fascination that gets under the skin, makes you want to solve a mystery that may never be solved.

Thirty-three miles north of Las Vegas we came to the little settlement of Crystal—and here a winding desert trail takes off on the right toward the Valley of Fire.

"But this is the road the ranger in Boulder City advised us *not* to take in the summer time," Don reminded me. And since we had no desire to assume unnecessary hazards—we continued along the paved highway to Glendale. Just beyond this crossroads village a well-graded road leads to Overton and thence into the Valley of Fire.

We followed the side-road through fertile Moapa valley 13 miles to Overton postoffice. At this point we were not far from Lake Mead.

There we were fortunate in meeting George Perkins, early pioneer of the region, longtime resident of Overton, and member of the historic posse which years ago tracked down and killed the famous Nevada renegade Indian, Mouse, in the upper reaches of the Valley of Fire.

"You've picked a warm season to be visiting the Valley of Fire," Perkins suggested. Then he told us some of the interesting places to be seen, and gave us directions for reaching the petroglyphs,

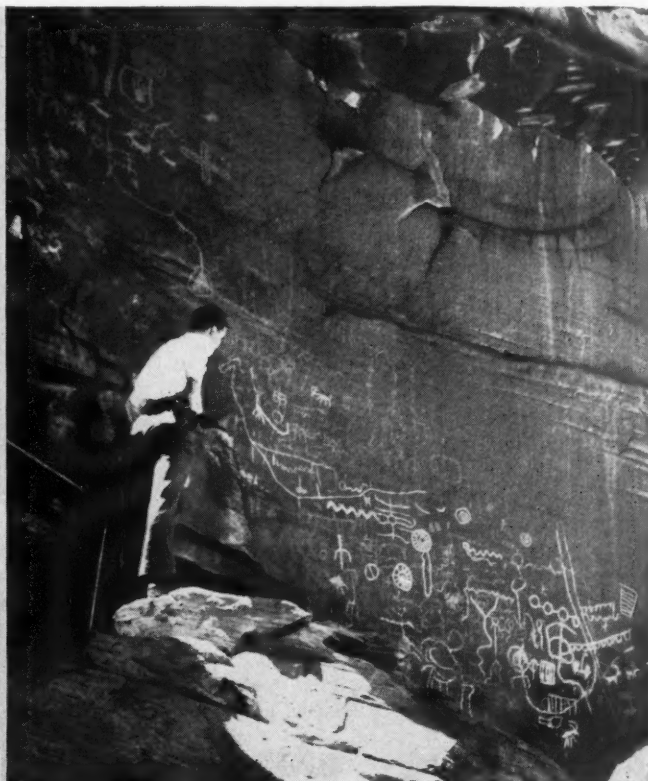
the petrified trees, Atlatl rock and other scenic points.

On a little hill near the south edge of Overton is a museum maintained by the park service under the direction of courteous Ranger Irving D. Townsend. There we saw relics of the Lost City civilization, Pueblo Grande de Nevada, that once thrived in lower Moapa Valley—a city now buried beneath the rising waters of Lake Mead. Outside the museum are splendidly built reproductions of houses and a kiva of the Lost City. Realizing that the waters of Lake Mead would destroy valuable material buried in the ruined pueblo, archaeologists worked long and hard excavating Pueblo Grande, bringing much of the unearthed material to the museum where it is now on display. We were told that the Lost City civilization may have supported a population of 20,000 inhabitants. What happened to them is another of the mysteries of the desert.

Six or seven miles south of Overton the road swings to the west and heads toward the Valley of Fire. Two miles to the east a branch road stops at the lake. The countryside is barren desert. In summer it is very hot. But the winters are mild and delightful, and it is at that time of year—between October and May—that tourists are urged to visit the Valley of Fire.

Atlatl rock, rising abruptly from the floor of the valley, is composed of fiery red Jurassic sandstone. In the lower left foreground are steps and handrail constructed by the park service. Park signs direct the visitor to this landmark.

Prehistoric artists came to Atlatl rock to chisel their insignia on the smooth surface. Many of these petroglyphs are believed to have been made by the people of Pueblo Grande de Nevada, the Lost City, between 1200 and 1500 years ago.





Grotesque rock forms and fantastic caves formed by wind and rain make the Valley of Fire a paradise for photographers.

We came here in June and as we climbed west toward the valley a hot wind blew against the windshield. Ahead of us loomed low fiery-red hills.

Soon we topped a rise. Before us the road wound down into a valley. From the dull colorless floor on both sides rose brilliant red sandstone ridges that seemed to leap like tongues of flame from the ground. How aptly named it was — Valley of Fire! Red Jurassic mountains, pitted and eroded by countless centuries of beating winds and rains. Caves, grotesque forms of all descriptions.

Eighteen miles from Overton we reached the site of the petrified trees. While not nearly as extensive as the famous Arizona forest it is none the less interesting. Geologically the petrified trees are younger than the red Jurassic sandstones forming the valley walls, having been laid down in later sedimentary deposits.

A short distance farther to the west we found the famous Atlatl rock. This huge red sandstone mass rises abruptly from the valley floor. Its surface wherever primitive man could reach, is pock-marked with Indian petroglyphs and other markings. Steps cut into the rock by the park service led us half way up

the top to a great overhanging section of rock. There, upon the relatively smooth surface was a varied assortment of splendidly preserved glyphs. They seemed so fresh, so clear — they might have been made but yesterday.

Of particular interest, among the countless petroglyphs are two that immediately attract the eye. The first is a drawing of an atlatl — which gives Atlatl rock its name — a primitive implement for hurling arrows or spears. Still used by the black-fellows of the Australian bush, it was used by some of the early American Indians before the advent of the bow and arrow. It is a long stick, weighted at the handle end, and notched at the other for the insertion of the feather end of the arrow. Mechanically speaking, it is a device for lengthening the arm and consequently increasing its leverage for throwing. It amounts to hurling the arrow with an arm considerably longer than normal.

The other interesting drawings are those of several Bighorn or mountain sheep which pioneer George Perkins says were numerous in the valley as late as 1885 but which are no longer found there.

For the most part the etchings are un-

decipherable. Individual figures are believed to have certain significance such as the sign for water, but for the most part they are a complete mystery. Atlatl rock is but one of countless places throughout the valley where the prehistoric Indians left their writings.

Archaeologists estimate the age of the petroglyphs as between 1200 and 1500 years. This is thought to coincide with the Lost City civilization. It is quite probable that the Valley of Fire was once a hunting ground of these ancient people who also were impressed as we are today by the flaming red rocks of the Valley. And being impressed they may have left their marks and scribbles on the rocks just as members of our own civilization enjoy carving their names and other symbols in places of natural beauty. However, as these primitive races were superstitious, worshipping various gods, it is possible the spectacular Valley of Fire kindled these superstitions and led the tribesmen to scratch upon the rocks symbols of a religious nature.

We climbed among the rocks for many hours, peered into distorted wind-cut caves. The more we climbed and saw the more we realized how impossible it is to become acquainted with the really worthwhile things of the desert by merely following roads and trails.

According to Perkins, the Valley of Fire proper is approximately 20 miles long and from 2 to 7 miles wide. First discovered by the Mormon pioneers in 1865 it was used to some extent as a range for cattle and horses. The first road across the south end of the Valley was constructed in 1912 but abandoned after a few years. Except for the road through Overton and the cut-off from Crystal, the valley is accessible for the most part only on foot or horseback. The northern portion is still as wild as it was in the prehistoric ages.

"The Valley of Fire," Perkins told us, "was in all probability a hunting ground for the Lost City civilization, where the ancients killed mountain sheep or Bighorn with the atlatl and later with the bow and arrow with barbs or heads tipped with stone. These arrowheads were made from jasper, flint, and obsidian. The early day Pahute of this section also used arrowheads made from these various stones, but of a little different workmanship."

As we finally left Atlatl rock and started back toward Overton we were determined to return again in the cool of the winter months for a more thorough exploration. We are confident that among the miles of broken fiery red sandstone hills there must still be isolated spots where no white man has ever set foot—places where some further obscure remains of the Lost City of Pueblo Grande might still be found.

The history of the West—and of the civilized world for that matter—has been a story of incessant conflict between the destroyers and the conservers. The destroyers were predominant for many years. They killed off the buffalo herds and antelope. They over-grazed the once lush range country. They slashed down the timber and polluted the streams. In their greed for money they gave no thought to the beauty of the landscape nor the welfare of the generations to come after them.

Eventually there came a generation of Americans with greater vision — men and women who saw the folly of the uncurbed destruction that was taking place. Under the leadership of Theodore Roosevelt and Gifford Pinchot and other humanitarians a national program of conservation was launched. The parks, the forest reserves, and the federal, state and county laws on the books today for protection of natural resources, are evidence of the progress that has been made.

The conflict still goes on—but the conservationists in recent years generally have had the power of public opinion on their side—and it has been the winning side.

In California, Newton B. Drury has for many years been an aggressive leader on the side of conservation. Because his recent appointment as director of national parks places him in a key position in the great task of protecting the natural resources, a brief biographical sketch of him is given here for Desert Magazine readers.



Newton Drury

New Director of National Parks

NEWTON BISHOP DRURY is the son of pioneers. His father, Wells Drury, crossed the plains in a covered wagon in 1852 and had an adventurous career in Gold Hill and Virginia City and later in Los Angeles as a newspaper editor.

Newton was graduated from the University of California in 1912 and served on the faculty there until the World war when he enlisted in the air service, balloon division, and was commissioned first lieutenant.

Following the war in 1919 he became secretary of the Save-the-Redwoods league of California, and it was largely through his efforts that 40,000 acres of redwood forest, valued at more than \$6,000,000 were acquired by the people of California.

When the California park commission was formed in 1928

Drury was employed as acquisition agent, and has played a leading role in the development of the 70 state parks now in the state. Having an inherent fondness for the desert, he has been especially active in the creation of the Anza Desert state park in Southern California.

While working for the preservation of the California redwoods Drury was in close touch with Stephen T. Mather, founder and first director of the national park service. Mather gave California a fine redwood grove near Weott, Humboldt county. Franklin K. Lane, who later became secretary of interior, was the first president of the Save-the-Redwoods league and Drury worked in close cooperation with him for many years.

Secretary Ickes sought to bring Drury into the national

THERE'S MYSTERY AND CHARM

... in the desert country for those who can see behind and beyond the grim mask. Not every Desert Magazine reader has easy access to the picturesque canyons and remote Indian camps — but every reader may acquire an intimate knowledge of this great region through carefully selected books. Here is a recommended list:

GUIDES

DEATH VALLEY, A GUIDE. New publication of Federal Writers Project. Very complete and beautifully illustrated — \$1.00; cloth \$1.75

WHERE SHALL WE GO, A Guide to the Desert. William Mason and James Carling. 17 trips in Southern California desert out of Palm Springs with maps and mileage. Brief description flora and fauna 50c

GRAND CANYON COUNTRY, M. R. Tillotson and Frank J. Taylor. A thoroughly accurate handbook of information covering geology, wildlife, history and recreation. 108 pages \$1.00

DAYS IN THE PAINTED DESERT and the San Francisco mountains, a guide, by Harold S. Colton and Frank C. Baxter. Maps, flora, fauna, geology and archaeology. 113 pages \$1.00

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INDIANS

INDIAN TRIBES OF THE SOUTHWEST, Mrs. W. M. Smith. A vivid useful handbook on the desert tribes. 160 pages \$1.50

THE TRUTH OF A HOPI, Edmund Nequatewa. Legendary history of the Hopi Indians as told by one of them. 114 pages \$1.75

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THE DESERT, John C. Van Dyke. New edition of a desert classic which has never been equalled for description of the mystery and color of the desert. 33 photos by J. Smeaton Chase. Cloth bound, 257 pages \$3.00

BOOKS OF THE SOUTHWEST, Mary Tucker. 105 page bibliography. Paper bound 75c

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DESERT ROUGH CUTS, Harry Oliver. Short yarns about Borrego Desert characters, 6 1/4 x 9 1/2, 64 pages. Illustrated with cuts made by the author. Bound in boards, cloth back \$1.50

WITH FATHER KINO ON THE TRAIL, by Frank C. Lockwood. Published by University of Arizona. Paper bound, 142 pages and map 50c

ARIZONA PLACE NAMES, by Will C. Barnes. Published by University of Arizona. Paper bound, 603 pages \$1.50

ARIZONA AND ITS HERITAGE. University of Arizona publication. Paper bound. 291 pages \$1.50

MINES AND MINERS. Historical study of the theater in Tombstone. By Eugene Willson. University of Arizona publication. Paper bound. 207 pages \$1.00

TREE RINGS AND CHRONOLOGY. By A. E. Douglass. Published by University of Arizona. Paper bound. 36 pages.. 50c

HOT IRONS: Heraldry of the range. By Oren Arnold and John P. Hale. 242 pages \$2.50

Prices above postpaid in U. S. A.
3% sales tax added for buyers in California.

Desert Crafts Shop

636 State Street

El Centro, California

park service in 1933, but at that time he preferred to remain with the California park commission.

Drury is an honorary member of the Sierra club of California; a research associate in study of primitive landscape, Carnegie institution; vice president of the American Forestry association; a director of the National Conference on State parks, and has served as chairman of the conservation committee of the American Legion of California.

His family consists of his wife, Elizabeth Schilling Drury, and three children, Betty, Newton Jr., and Hugh Wells. All of them are enthusiastic outdoor fans.

Arno B. Cammerer, whose ill health made necessary his resignation as park director, will remain with the park service in an advisory capacity, according to the announcement of Secretary Ickes.

The Desert TRADING POST

Classified advertising in this section costs five cents a word, \$1.00 minimum per issue—actually about 2 1/2 cents per thousand readers.

POINTS OF INTEREST

LIVING ON THE DESERT stimulates new life interest therefore choose a good Desert Village, Cathedral City, California. See W. R. Hillery.

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INDIAN RELICS. Beadwork. Coins. Minerals. Books. Dolls. Old Glass. Old West Photos. Miniatures. Weapons. Catalogue 5c. Vernon Lemley, Osborne, Kansas.

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BLACKBURN MAPS of Southern California desert region. San Bernardino county 28x42 inches \$1.00; San Diego county 24x28 inches 50c; Imperial county 19x24 inches 50c. Postpaid. Add 3% sales tax in California. DESERT CRAFTS SHOP, 636 State Street, El Centro, California.

LIVESTOCK

KARAKULS producers of Persian Lamb fur are easy to raise and adapted to the desert which is their native home. For further information write Addis Kelly, 4637 E. 52 Place, Maywood, California.

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80 ACRES about 6 miles south of Coachella, 1 mile west of Highway 99. Two good wells. 60 acres has been cleared. Balance has heavy stand of mesquite, which guarantees the quality and productivity of the soil. Will sell or Exchange. Courtesy to brokers. Address L. J. Thomas, Imperial, California.

W. E. HANCOCK

"The Farm Land Man"

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The DESERT MAGAZINE

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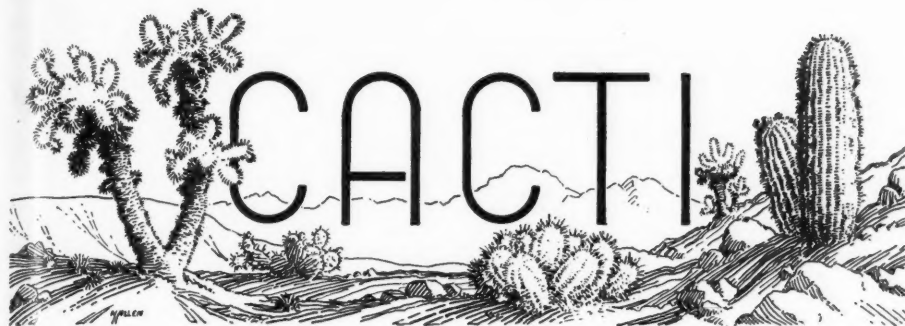
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AZINE



Coville's Barrel Cactus

By ROY MILLER

7 HERE are several species of barrel cactus or Bisnaga native to the Southwest, nearly all of which belong in the genus *Ferocactus*, meaning "ferocious cactus." They are distinguished by their large cylindrical form and heavy covering of spines. At first glance they remind one of young Saguaro plants, but they are more deeply grooved or ribbed and the spines are longer and more likely to be curved.

The somewhat rare *Ferocactus covillei* Br. and R. is a favorite with collectors. It ranges sparsely west of Tucson, Arizona and south of the Gila river, often occurring with the Organ Pipe cactus and the giant Saguaro.

Coville's barrel is a striking plant in its native habitat. The body is a very bright, lush green and the red spines are arranged along the ribs. There are 4 to 8 radials and one central spine at each areole. The simple spine arrangement exposes the body of the plant more than in other species, giving it a clean cut appearance. There are up to 32 thick, obtuse ribs.

The largest specimens grow to a height of about 4 feet. In the spring the red or yellow flowers appear in a crown around the top, crowding their short tubes through the spines to open into a broad funnel in the bright sun. The fruit is light green, about 2 inches long, and filled with small black seeds which are relished by the birds.

This species was named for Dr. Frederick V. Coville (1867-1937) who for many years was curator of the U. S. national herbarium, was leader of the Death Valley biological expedition of 1891, and whose record of this trip is still the standard Death Valley botany.

Two of the more frequently seen Bisnagas are *Ferocactus acanthodes* (Lem) Br. and R. and *F. wislizeni* (Engelm) Br. and R. The former is the common California species, although it grows also in southern Nevada and northern Lower California. It is comparatively tall and slender. The spine arrangement is not as simple as in the Coville barrel, being made up of 7 radials and 4 centrals. The upper central spine is the broadest and is straight; the lower one is down-curved. The slightly wavy and obtuse ribs vary in number from 13 to 23.

The *wislizeni* is largely an Arizona species, extending into New Mexico and Texas. It is commonly 2 to 4 feet high but has been observed as tall as 9 to 11 feet. It blooms later than the California species. Its spines include 15 to 20 lateral bristles, 3 lower radials and 3 slenderer upper ones with one hooked. The 12 to 25 ribs are rather acute.

Fiction writers have built many fantastic tales around the barrel cactus, describing it as a never-failing source of water for the thirsty traveler. As a matter of fact a limited supply of warm mucilaginous liquid with a rather bitter flavor may be obtained by those who have the tools and the patience to carve off

the crown of the barrel and mash the greenish pulp in the heart of the stalk. In an emergency this moisture may serve for water—but the supply is neither very accessible nor very palatable.

The novelty of cactus candy is responsible for the disappearance of many native stands of barrel cactus. Since the advent of conservation laws, it has been found that melon rind makes better cactus candy than cactus itself!

FIELD TRIP SCHEDULED BY SOUTHWEST GROWERS

A Labor Day weekend trip to Carl Hoffman's "Do-Little-Rest-More" ranch near Harper Dry lake, north of Barstow, has been planned by Southwest Cactus Growers of Los Angeles.

This outing will be of interest to both the cactus and gem collector. Fine specimens of opal and jasper are reported in the Opal mountain and Black canyon region which the group will visit on Sunday or Monday. This is also the habitat of *Sclerocactus polyancistrus* (see Desert Magazine, May 1940). A side trip to Ord mountain will take members to the area of *Opuntia erinacea*, *Echinocereus engelmannii*, *Phellosperma tetrancistra* and *Coryphantha alversonii*.

At the recent annual election, Roy Miller, John Akers and George Olin were re-elected president, vice-president and secretary respectively. Waldie Abercrombie is the new treasurer. Board members are Mrs. Maybelle Place, Mrs. Florence Cariss and Harry Beam.



Photograph of Coville Barrel Cactus by George Olin in Organ Pipe national monument, Ariz.

Oklahoma City cactus society will devote its September 5 meeting to the principles of hybridizing, with Mrs. James H. Hyde as chairman.

The Crassulaceae is to be the subject of Mrs. Della Jaynes and Mrs. Mina Singmaster when the Des Moines, Iowa cactus club meets September 26.

Warren, Ohio cactus club installed the following officers in July: Mrs. George Little, president; Mrs. W. L. Post, vice-president; Mrs. L. S. Crow, secretary-treasurer; Mrs. F. S. Van Gorder, sunshine; Mrs. W. L. Post, press; Mrs. R. A. Church, scrapbook. Club recently visited the Rutter greenhouse in Akron, Ohio to inspect cacti collection.

Washington Cactus and Succulent society held a 5-day show beginning July 30 in a Seattle department store auditorium. Bert E. Williams, show director was assisted by the following chairmen: Mrs. Harry H. Lewis, grafts; Mrs. Christy Eder, beginner's collection; Mrs. Ross Nichols, crested and monstrous forms; Mrs. William Christensen and Mrs. R. E. Eyler, cactus and succulent arrangement; Armand Favro, food elements and proportions. Special exhibitors were Mrs. A. J. Cotton, Mrs. Charles Trager and Mrs. P. H. Ridgway. A feature of the show was a cactus garden composed of several hundred plants native to Washington, Oregon, Colorado, Kansas, Arizona, Texas, California, Mexico and South America.

Special merit award went to the Cactus and Succulent club of Chicago when it exhibited in the June plant and flower show held by the Beverly Hills Woman's club in the Ridge Park fieldhouse.

Long Beach cactus club held its August 25 meeting at Griffith Park observatory, Los Angeles followed by picnic dinner in nearby Fern canyon.

Desert Garden club of Boulder City, Nevada, will hold its first fall meeting September 13 to appoint committees for first annual Chrysanthemum Fete to be held in October. Russel Crater of the national park service who has just returned from Yale university will be the speaker at the regular monthly meeting September 27 in the municipal court room.

Roswell, New Mexico, cactus club is a new affiliate of the national cactus and succulent society.

ANSWERS TO DESERT QUIZ

Questions on page 14

- 1—Chocolate range.
- 2—Tombstone.
- 3—Oyster fossils.
- 4—Mutton.
- 5—Reducing the air pressure in the tires.
- 6—Cochise.
- 7—Ocotillo.
- 8—Archaeologist.
- 9—Salt river valley.
- 10—Rhyolite.
- 11—Copper.
- 12—Coronado's quest.
- 13—Arizona.
- 14—Clerk of the county in which the claim is located.
- 15—Utah.
- 16—Antelope.
- 17—Chase.
- 18—Death Valley.
- 19—Go to the bottom of Grand Canyon at the foot of Bright Angel trail.
- 20—Mexico.

Mines and Mining...

Morenci, Arizona...

Nearly \$1,000,000 worth of turbines will be installed in the Phelps-Dodge power house here. Largest order in Arizona's recent mining history has been placed with General Electric company, calls for \$840,000 and P-D will announce still bigger orders soon. For months 200 steel workers will be employed on the 25,000-ton concentrator and smelter to treat ore from the immense deposit now being stripped of its overburden. Contract has been let for 50,000 cubic yards of concrete, mostly for buildings and machinery foundations.

Mina, Nevada...

Production continues to increase steadily in the Mina cinnabar belt, operations spurred by war demands for quicksilver. From the Mina group six flasks of mercury were shipped daily, worth about \$1200.

Winslow, Arizona...

Indications of high grade and low grade manganese in extensive deposits have been found on Blue Ridge in the Long valley area 35 miles south of here. Claim owners hope to enlist interest of the United States bureau of mines for complete survey.

Phoenix, Arizona...

Largest nickel deposit in the United States and one of the largest in North America has been found in the barren mountains of the Arizona "strip"—a vast almost uninhabited region between Grand Canyon and Utah's southern border. Authority for this statement is W. J. Graham, member of the Arizona mineral resources board. Mining men say this "last frontier" may turn out to be the richest part of the state. Graham reports the deposit was discovered by five prospectors about two miles south of the village of Littlefield, oldest Anglo-Saxon settlement in Arizona. It is in the northwestern corner of Arizona, eight miles from Nevada to the west and eight miles from Utah on the north. Graham says engineers report the field is about 12 miles long, 600 feet wide at its southern end and 1400 feet wide at its northern limit. Nickel is very important in the national defense program. The United States now depends on foreign countries for its supply. "This deposit is so huge," says Graham, "I couldn't even start to estimate how much it is worth."

Tucson, Arizona...

Mining operations are expanding fast in southern Arizona, reports Miles Carpenter, field engineer for the state. New concentrating plants provide stimulus to small mine owners. In the Patagonia district the new Trench mill and the Callahan flotation plant are important factors in current development. Near Nogales a flotation plant has recently been completed. Arivaca miners are promoting a custom mill, and a combination jig and flotation plant is being installed at the Paymaster mine in the Olive camp, 25 miles south of Tucson.

Salt Lake City, Utah...

Vast quantities of manganese will be stored near Ogden for use as needed by the federal government, according to P. A. Mattingly, president of Western Alloys, inc. This company is developing properties near Battle mountain, and it is said 400,000 tons of ore will be prepared to meet government specifications. Engineers say 280,000 tons of manganese ore is in sight in the first 100 feet of depth in a deposit 15 miles south of Valmy.

Las Vegas, Nevada...

Decisions by the U. S. district court in Oregon and the Utah state supreme court are disturbing Nevada mining men. Ruling that mine lessees are employees of the mining company from which they are leasing and so are subject to provisions of the federal wage and hours act, would, if enforced, result in termination of the leasing system and widespread unemployment of miners. It is stated. In Utah major companies refused to renew leases expiring June 30.

Park City, Utah...

Park City is building a two-mile highway of silver, lead and zinc. To be strictly accurate, the roadway is being surfaced with tailings from a mine, not valuable enough to ship to smelters, but containing metals from small fissures crossed by miners running exploration drifts, raises or crosscuts. Small boys here, equipped with toy outfits for melting and molding lead soldiers find the paving material rich. They melt down chunks of the ore and cast toy soldiers.

Denver, Colorado...

When the seventh annual session of the metals section of the American mining congress convenes in Colorado Springs September 16, the United States search for strategic minerals will be one of the chief topics. Part to be played by the industry in the national defense program has been outlined in preliminary conferences between prominent mining men from all parts of the west.

Nogales, Arizona...

Nogales stands first among ports of the United States for entry of crude graphite, mined principally in Sonora. During the fiscal year 1939, shipment of graphite through Nogales totaled 202 carloads.

HILTON'S Art and Gem Shop

JOHN W. HILTON, Owner

ON U. S. Highway 99, Ten Miles South of Indio

ACROSS FROM VALERIE JEAN DATE SHOP. P. O. ADDRESS, THERMAL, CALIF.

The DESERT MAGAZINE

Desert Place Names

Magazine is indebted to the research work done by the late Will C. Barnes, author of "Arizona Place Names;" to Betty Toulouse of New Mexico, and Hugh F. O'Neil of Utah.

ARIZONA

EL TOVAR Coconino county

Railroad station and hotel at end of Grand Canyon rr at the Canyon. After Don Pedro Tovar, one of Coronado's captains. If this was intended merely as a name, it is perfectly correct. But if, as generally supposed, the name was to honor the first European to see the Grand Canyon, it is a grievous error, says Barnes. Fact is that Cardenas, another of Coronado's captains, was first real discoverer of the canyon. According to Bancroft, "In August 1541 Captain Tovar with a small force was sent to explore the Cebolla country, especially the province of Tusayan. They found the Moki villages and the Indians mentioned a great river several days' journey to the north. Thereupon Don Pedro returned and reported to the general. Then Captain Cardenas was sent with 12 soldiers to seek the great river. He marched north and west for 20 days and then found the river. He spent five or six days trying to get down its precipitous banks, but could find no place to descend. This was the first visit of Europeans to the Canyon of the Colorado."

AVRA VALLEY Pima county

East of Silver Bell. According to the postmaster at Rillito the name is from a Papago word meaning big plain. Hornaday describes the valley as a vast flood basin into which many arroyos run down from the surrounding mountains to lose themselves therein. Secretary of the U. S. geographic board writes: "On April 6, 1934, the name Avra was brought to our attention by the U. S. geological survey, which pointed out that many maps gave two names for the same valley, Avra for the northern fraction and Altar for the southern. The board thereupon decided the question as follows: Avra valley in Arizona for the northern section which drains north, its waters ultimately reaching the Gila river. Altar valley is the valley of the Rio Altar in Mexico, draining southwest, its waters ultimately reaching the Gulf of California."

CALIFORNIA

TUMCO Imperial county

Ghost of a mining camp in the Cargo Muchacho range, once boasting a population of 1,000. Originally known as Hedges, but renamed by the United Mining company, which gained possession of the mines. The town's name is made up

of the first letter in each word of the mining company's name. At Tumco there was a large mill, and output of several millions in gold was reported before operations were abandoned in 1918. Several properties were developed to depths of 1,000 feet or more. In the vicinity there has been a revival of activity during recent years, due to higher prices for gold, but Tumco's cemetery today has more graves than the camp has living residents.

HELL'S GATE

Inyo county
Named in 1905 when teams leaving protecting walls of the canyon would start and shake their heads as the burning summer heat scorched their tender noses. "They thought they had stuck their noses through the gates of hell," one teamster said. Hell's Gate, says the federal writers guide, is one of the most accessible of the several viewpoints on the rim of Death Valley. Below to the south, brown, mauve and white streaks converge on the salt beds. The Funeral range curves toward Furnace creek wash, and the Panamints culminate in the sharp point of Telescope peak.

NEW MEXICO

MAGDALENA Socorro county

Town and mountain range. Historians are in doubt as to the exact date of the town's founding. It grew gradually from a ranchhouse site to a community. Approximate date of establishing the settlement is given as 1884. It takes its name from a mountain peak at the northern end of a nearby mountain range named "Magdalen" by a Spanish priest of one of the early expeditions to New Mexico, who discovered a formation of rock he believed resembled paintings of the Magdalen he had seen. The mountain range also takes its name from this peak. In early years, it is said, the area near the figure was a sanctuary in which a hunted fugitive, white or red, could seek refuge in safety.

UTAH

HONEYVILLE Box Elder county

Elev. 4,268; pop 484. There are two theories as to origin of this name: 1.—That it was named by a beekeeper, Abraham Hunsaker, because of his interest in the honey industry. 2.—That it was named by its Mormon settlers as a reminder of the Biblical land of Canaan, a land "flowing with milk and honey."



POMONA, SEPT. 13-29

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LOS ANGELES CALIFORNIA

HERE AND THERE . . . on the Desert

ARIZONA

Window Rock . . .

Navajo children don't need spanking. This is the opinion of Dr. Clyde Kluckhorn, noted anthropologist of Harvard, who has been studying 48 Indian children for a number of years. There are few spoiled little ones among the Navajo, Dr. Kluckhorn says and "physical discipline is not needed to the extent to which it is necessary with white juveniles." His studies of the red man show close relationship between the fear of starvation and disease and the various Indian ceremonials.

Phoenix . . .

More than one-tenth of Arizona's population is Indian. Returns from the 1940 census show the state has half a million residents, 52,000 of them red men. Figures from 14 counties total 498,520, according to preliminary reports.

Yuma . . .

Free distribution of more than 500 packages of Chilean mesquite seeds is announced by the Yuma chamber of commerce. This tree is fast growing, has dense foliage, provides fine shade and is especially suitable for the Yuma climate, since it flourishes with little watering. Planting in midsummer is advised.

Flagstaff . . .

To promote the use of their product, members of the Arizona wool growers association in 54th annual convention here voted to tax themselves five cents a bag. Due to increased use of synthetic fibres, wool consumption has decreased 50 per cent, according to Jerrie Lee, association secretary. Eugene Campbell of the Ash Fork livestock company, was elected president; Fred S. Porter, Phoenix, first vice president; T. J. Hudspeth, Seligman, second vice president and Ramon Asa, Bellmont, third vice president. Lee was reappointed for his third term as secretary and directors for two-year terms are: James E. Babbitt, Flagstaff; John R. Norton, Phoenix; Leonard Sawyer, Winslow; director for one-year term, Jose M. Echenique, Casa Grande.

Window Rock . . .

Navajo Indians are launching new business ventures. Set up by decree of the tribal council, a cannery at Many Farms, north of Chin Lee, has turned out 50,000 cans of meat in 10 weeks. Tribesmen run a new sawmill at Buell, 14 miles above Fort Defiance, a flour mill in the Lukachukai section, and coal mining goes on with tribal workers at several points on the reservation. A tanning plant is proposed in connection with the cannery, whose output goes to reservation hospitals and schools.

Phoenix . . .

In July Salt river valley closed its most successful cantaloupe season of the past 10 years, shipping approximately 3,000 carloads. Final figures may pass the total shipped from Imperial Valley, California, for the first time in history of the melon industry. Imperial was hit by an earthquake that upset irrigation facilities in the middle of the cantaloupe harvest this season, and suffered heavily from mildew. Shipments from the California district amounted to about 2,750 carloads.

CALIFORNIA

Independence . . .

Death Valley Scotty has been named defendant in a suit asking for nearly a quarter of a million dollars. Plaintiff is Scotty's partner, A. M. Johnson, who claims he loaned \$243,291.84 to Scott between the years 1904 and 1939. On July 12 Scotty drove to Independence with Johnson and the summons in the suit was served then. In all the years since 1905 when Death Valley's publicity king made his bid for fame by chartering a special train for a record run from Los Angeles to Chicago, Scotty has insisted his money came from a hidden gold mine on the desert. But, says an Independence newspaper, "by most of Inyo county it has been an accepted fact that Johnson, Chicago hotel man, has been Scotty's gold mine." Pending court action is reported to be "friendly," to forestall anybody else from making claims against Scotty's holdings. In Los Angeles a lawyer says James Gerard, former U. S. ambassador to Germany, will sue Scott in an effort to get some return from money Gerard said he advanced as a grubstake to the Death Valley prospector in 1902.

Bishop . . .

California's fish and game commission proposes to establish in the southern part of Owens valley a 300,000-acre game preserve from Tinnemaha dam south to a point below Lone Pine for pheasants, quail and chukkers. A 10-year program has been suggested, federal funds are said to be available for the project.

El Centro . . .

Reclamation bureau crews are building a 66-mile telephone line from Siphon Drop power plant on the Colorado river to the western end of the All-American canal in Imperial valley. Clay lining of 15 miles of the canal in the Bard district has been completed. Seasoning of the 80-mile giant ditch, largest channel for irrigation water ever dug in the western hemisphere, will begin in September. Excavation of the first 40 miles of the 135-mile Coachella branch of the All-American has been completed, the second 40-mile stretch is about one-third finished.

Needles . . .

Seven truckloads of rainbow trout have been released in the Colorado river below Boulder dam since 1937. Bill Cook of Kingman, president of the Mohave county, Arizona game protective association, says trout thrive in the cold water, reports catches up to 23 inches in length. For a distance of 60 miles below the dam the river is said to be ideal for trout. Mohave county supervisors have asked the federal bureau of fisheries to establish trout rearing ponds in that region.

NEVADA

Las Vegas . . .

Jeanne Godshall, Victorville, California, rodeo "sweetheart," was married here in July to Herb Perry, musical director of the Walt Disney studios. Miss Godshall is the daughter of Mr. and Mrs. Cal E. Godshall. Her father is a dude ranch operator at Victorville.

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Boulder City . . .

Lake Mead, behind Boulder dam, will hold more water than engineers first estimated. Detailed studies recently completed now place storage capacity in the world's largest man-made reservoir at 32,359,274 acre feet, 1,859,274 acre feet greater than the 30,500,000 previously estimated. Present supply in storage: 24,191,000 acre feet.

Elko . . .

Movie extras and feminine stars ran into realism and didn't like it when filming scenes for the production "Brigham Young" near here. The story called for pictures showing invasion by Mormon crickets. Says one witness: "There was a band of crickets coming into the field 3½ miles long, and we had laid out 2½ miles of tin with 16 traps per mile. The crickets were in the traps four feet deep, and for about 100 yards back of the tin, crickets averaged about 100 per square foot. The women, both stars and extras hated to wade out in the crickets and there was no make believe about their swinging clubs, brush, old sacks, or anything else they could get to keep off the insects." After two days of this, Mary Astor fainted, the director had plenty, the company packed up and flew away to Hollywood in chartered plane.

Overton . . .

Life will not be dull now for a bighorn ram, isolated on a rocky island in Lake Mead when water piled up behind Boulder dam. National park service has provided him with a mate. A female mountain sheep, trapped by Delbert Huntsman, was ferried to the island by Huntsman and Ranger A. Cherry.

Ely . . .

Lights for Lehman caves will be installed by the national park service, under direction of Guy D. Edwards, supervisor, revealing to visitors for the first time the beautiful and intricate formations in the underground chambers on the eastern border of Nevada. Improvements are being made to roads approaching the cave.

NEW MEXICO

Santa Fe . . .

Ben Quintana, 18-year-old Cochiti Indian, wanted to "buy something they need" for his family, with \$1,000 prize money he won in a national contest with his painting depicting arrival of Coronado in the Southwest. There were 52,000 entries in competition sponsored by a magazine and Ben took first honors. Ben's father, Jose, insisted that his son continue art studies. Of the prize money \$800 will be invested, proceeds to be used for benefit of Ben's parents, Ben will spend \$200 for himself. In August the boy artist goes to New York for 10 days.

Aztec . . .

Unrest due to perennial problem of stock reduction on over-grazed Indian lands broke out again in a protest meeting here attended by 250 Navajo from the eastern reservation. Fourteen Indians had been arrested on federal warrants alleging overgrazing of horses in excess of the allotted 10 horses per Indian. Superintendent E. R. Fryer of the central agency at Window Rock, Arizona, said the arrests were made "on warrants issued by tribal courts." Signatures and thumb prints of 435 Indians were attached to a petition sent to Secretary of the Interior Harold L. Ickes, asking for change in tribal government and complaining against the federal government's program.

Las Vegas . . .

New Mexico's state tourist bureau hopes to make old Fort Union the state's ninth national monument and has submitted proposal to the national park service. Fort Union was built in 1851, located near the Turkey mountains between here and Wagon Mound, west of U. S. highway 85, which parallels the old Santa Fe trail in that vicinity. Two main branches of the trail made a junction there and the fort was an important stop until the coming of the railroad and the death of overland travel on the trail. The old buildings are in good condition, restoration will involve little work, it is said.

Gallup . . .

Attaches at Fort Defiance Indian hospital are going to school to learn Navajo terms for ailments so that white doctors may better diagnose complaints of their patients. White medicine men have had trouble interpreting Indian explanation of symptoms.

Albuquerque . . .

New Mexico will omit 19,000 brands from the revised edition of the state book of cattlemen's herd marks, says Sam McCue, secretary of the cattle sanitary board. Six months were allowed for re-recording New Mexico's 37,000 cattle brands. Deadline came in July, with only about 18,000 re-listed.

Santa Fe . . .

In the northeastern section of New Mexico 30 new historical and scenic markers have been erected. Coronado's route, trail of the 49ers, Santa Fe trail, route of the Mormon battalion, grave of Black Jack Ketchum are among notable locations.

UTAH

Monument Valley . . .

Movie money has poured into the pockets of Navajo tribesmen in the sunbaked canyons of Utah's remote regions and as a result many hogans are well-stocked with food supplies for the coming winter. Last year was tough. For the second time in the memory of tribal elders the San Juan dried up and parched lands gave little food to Indian flocks. But when "Kit Carson" was filmed this year northeast of here 200 Navajo men, women and children were hired at \$5 a day for two weeks, others had jobs keeping roads ready for big Hollywood trucks. Trading posts sold silver and turquoise, leatherwork and rugs to filmland stars and technicians. Hosteen White Horse, 85-year-old elder of the tribe, earned double wages. He is featured in the Kit Carson film.

Vernal . . .

Dinosaur national monument was closed June 30, but work was resumed for a short time in July, following protest to Washington. A guard and guide will be maintained at the monument throughout the summer. It is hoped funds will be provided to cement in bas-relief fossil remains of dinosaurs uncovered in rock walls at the monument.

Salt Lake City . . .

Paul R. Franke has been appointed superintendent of Zion and Bryce canyon national parks, succeeding C. Marshall Finnan, who retired because of ill health. Franke transfers from the job of superintendent at Mesa Verde national park, Colorado.

Atchee . . .

This community has joined the list of ghost cities of the west. With wrecking of the Uintah railway and shops many houses have been moved away. Two years ago there were 37 voters here. Now there are two.

THE SPIRIT OF



by JOHN CLINTON

Up in Scappoose (that's not something Indians carry on their backs, it's a town in Oregon), there's one of the swellest couples you ever met—Mr. and Mrs. J. Knusel, by name.



Recently Mr. and Mrs. Knusel took a 12-thousand mile automobile trip through Switzerland, France, Ger-

many and Italy. They had a grand time, saw a lot of country and paid as high as \$1 per gallon for gasoline.

Then the war-scare started, and the Knusels started for home in the Italian Liner Rex along with 1668 other folks. The Rex was intended to accommodate 700! Well, anyway, now they're back home and mighty glad of it.

But what particularly intrigued me about this yarn is this. They started out with a brand new Dodge. And to be sure that the Dodge got only the best lubrication, you know what they did?



Yep, that's right—took along enough Triton Motor Oil for the whole blooming trip! I think that's the finest testi-

monial I've heard for a long time.

You see Triton forms so very little carbon itself that it allows your motor to burn up old carbon left by other oils, and blow it out the exhaust. This is usually accomplished within two to three thousand miles. Ping changes to Purr, and everybody's happy. Naturally, if you start out, as Mr. Knusel did, with Triton—you never do have any carbon worries. Try Triton next time. You can both feel and hear the difference.

UNION OIL COMPANY

Many strange plants are found in the desert region—and one of the most striking is Squaw Cabbage. Its range is limited but it is a very conspicuous citizen of the vegetable world in certain parts of the Mojave. It is useful as well as pretty—but not both useful and pretty at the same time. Mary Beal will tell you more about it in the accompanying text.



From Cabbages to Candles . . .

By MARY BEAL

SOME folks call it "squaw cabbage," and others prefer the name "desert candle." Either name may properly be applied to this versatile member of the mustard family for it is a cabbage in its juvenile days, and a candle in its maturity.

The thick bunch of blue-green leaves, at the tender stage before the flower-stalk makes its appearance, is a substitute for cabbage, cooked or raw, usually boiled as greens. It was prime fare not only for the Indian larder but for pioneer Americans—miners, prospectors and settlers. Even today, many desert dwellers gather it for greens. By some it is preferred to spinach or chard. I have enjoyed it thus more than once.

The candle period comes after the cabbage days are over. The stout hollow stem lengthens and swells, pushing up a foot or two above the leaf-cluster, like a waxen yellow taper set in a candlestick of light, blue-green leaves. The tiny flowers are at first a dense cluster, like a purple flame at the tip. The lower flowerets open first, fading white as they age, and as growth continues the raceme elongates until the last buds open at the very top, when the lower ones have developed into very slender, erect pods 2 to 4 inches long. When dry and dead the candles are still spectacular, standing in their erect whiteness for a year or more.

You'll find this unique plant only in the western and central Mojave desert, not everywhere present but in its favored locations sometimes lighting up acres and acres with its luxuriant abundance.

Botanically it is *Streptanthus*, and several species found in the desert are listed as follows:

Streptanthus inflatus
(*Caulanthus inflatus* of some botanists)

"Squaw cabbage" it was christened by the old-timers but many today prefer the more poetic name "desert candle." A very interesting annual 1 to 2½ feet tall, the succulent ovate to oblong leaves 1½ to 6 inches long, sessile and clasping. The tiny flowers are disposed along a hollow, inflated yellow stalk, very dense at the tip. The buds are a deep velvety purple but after opening soon fade to white. There are several areas in the central and western Mojave desert where it flourishes in great numbers. Most of the roads north and west of Barstow lead to fine colonies of it, particularly towards Randsburg.

Streptanthus major
(*Caulanthus major* of some botanists)

A very attractive perennial species found at higher altitudes in the Providence mountains of the eastern Mojave desert, in Nevada and Utah ranges and on desert slopes of the San Bernardino and San Gabriel mountains. A few stout flower-stalks, or sometimes a single one, rising a foot or two above the basal cluster of grey-green leaves, which are oblong or oblanceolate, usually dentate or somewhat lobed, 2 or 3 inches long. The flower-stem is leafless or nearly so and occasionally inflated, the lovely flowers about ½ inch long on very short pedicels, alternating along the stalk. The creamy calyx rounds out like a cup, constricted above, the sepal tips purplish, or the whole calyx purplish; the crisped narrow petals white-margined with a central purple line, emerging

only slightly from the calyx. The very narrow pods are 3 or 4 inches long.

Streptanthus crassicaulis
(*Caulanthus crassicaulis* of some botanists)

Somewhat similar to the preceding but an annual, though also reported as perennial, with a single much-inflated stem sometimes over 3 feet high. The grey-green leaves, mostly basal, vary in shape from ovate and blunt to sharply-pointed lanceolate, 1 to 3 inches long, on petioles as long or longer. The calyx is purple beneath a dense white-woolly covering, the petals purple with white margins, the slender pods 3 to nearly 5 inches long. This species is also a valuable food plant and is found above 5000 feet in desert ranges from Inyo county and the northeastern Mojave desert in California to Nevada and Utah.

Streptanthus ballii
(*Caulanthus ballii* of some botanists)

An annual slender-stemmed Colorado desert species, very tall-stemmed, up to 5 feet high, and branching from the base, most of the leaves basal, 2 to 7 inches long and pinnately lobed. The small flowers are not much over a quarter of an inch long, the hairy sepals yellowish-green or whitish, the petals creamy, the pods more or less curved. Found on slopes and in washes in ranges along the western and northern border of the Colorado desert from San Felipe to Piñon well north of Indio.

Streptanthus glaucus
(*Caulanthus glaucus* of some botanists)

A stout perennial with branching stems not more than a foot and a half high, the herbage covered with a white bloom. The leaves are ovate or roundish, entire, 2 or 3 inches long or more. The flowers are greenish-yellow and the slender, pedicelled pods up to 6 inches long. This grows above 5000 feet from the White mountains in California, through the Death Valley region into Nevada.

Streptanthus pilosus
(*Caulanthus pilosus* of some botanists)

A hairy-stemmed biennial up to 4 feet high, with pinnately-lobed leaves 2 to 5 inches long, the white-margined sepals greenish or purple, the short petals white. Found above 4500 feet from Inyo county to Nevada.

Streptanthus cordatus

A handsome perennial with one to a few stout stems 1 to 3 feet high, the ovate or oblong leaves with heart-shaped bases, sessile and clasping. The flowers are yellow and maroon or purplish, the long narrow petals white-margined. Reported from Inyo county ranges, Eastern Mojave desert into Nevada.



Metate . and . Mortero

Among those who are interested in the Indian artifacts of the Southwest there is much confusion in the use of the word *metate*. Many amateur collectors and others apply this word to all Indian grinding stones, disregarding the fact that there are two very different types of stone utensils used by the Indians and Mexicans, and that they are often used for quite different purposes.

In order to clear up this question, the Desert Magazine asked M. R. Harrington, curator at the Southwest museum in Los Angeles to define the two types of tools. He replied as follows:

"The word *metate* is of Aztec origin, the original form being *metatl* or *metatli*, if I recall correctly. It occurs with the same root *meta*, *mula*, etc., in many of the Shoshonean languages in the United States, including Paiute. The word was taken over into Spanish and now appears in most Spanish dictionaries. The following definitions, taken from the Novísimo

Diccionario de la Lengua Castellana, describe the Mexican form of the utensils. This is a rather free translation:

"*METATE*—Quadrangular stone supported on three feet so that it forms an inclined plane upon which it is convenient for the women, being on their knees, to grind with another cylindrical stone cooked corn and some other grains."

"*MORTERO*—Hollow round utensil made of stone or wood, in which are crushed spices, seeds, drugs."

"The hand stone for grinding on the *metate* is called *mano de metate*, and generally referred to as *mano*. The pestle used in the *mortero* is *mano de mortero*."

"In Cuba the common name for the mortar is *pilon*, and the verb meaning to grind is *pilar*."

The Mexicans often use the *mortero* for grinding samples of ore, and as a matter of fact American prospectors use an iron mortar for the same purpose.

Prizes to Amateur Photographers

Each month the Desert Magazine offers two cash prizes for the best camera pictures submitted by amateur photographers. The first award is \$5.00 and the second \$3.00.

Pictures are limited to desert subjects, but there is no restriction as to the residence of the photographer. Entries may include Indian pictures, rock formations, flowers and wild animals, canyons, trees, waterholes — in fact everything that belongs to the desert country.

Following are the rules governing the photographic contest:

1—Pictures submitted in the September contest must be received at the Desert Magazine office by September 20.

2—Not more than four prints may be submitted by one person in one month.

3—Winners will be required to furnish either good glossy enlargements or the original negatives if requested.

4—Prints must be in black and white, 3 1/4 x 5 1/2 or larger, and must be on glossy paper.

Pictures will be returned only when stamped envelopes or photo-mailers are enclosed.

For non-prize-winning pictures accepted for publication \$1.00 will be paid for each print.

Winners of the September contest will be announced and the pictures published in the November number of the magazine. Address all entries to:

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BOOKS OF YESTERDAY AND TODAY

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THESE MEN ALL HAD NOTCHES ON THEIR GUNS

Nine out of ten of the men who came West as farmers and cattlemen and merchants and miners during the last half of the 19th century were good citizens and hard workers, writes William MacLeod Raine. But the other ten percent included ruffraff, scoundrels and criminals.

In every frontier community there was conflict between these two elements — between those who wanted to earn a livelihood by honest effort and in peace, and those who sought wealth without work, and were willing to become killers to gain their end if necessary.

The man with the quickest draw and the deadliest aim was the most feared if not the most respected man in the settlement. Some of the fighting men of that day were the law officers—more often they killed in defiance of right and justice.

It is about these men—the gunmen of the early West that Raine has written his latest book **GUNS OF THE FRONTIER**, published by Houghton Mifflin company, Boston, 1940.

The book is a series of episodes in which "Wild Bill" Hickok, Ben Thompson, King Fisher, "Bat" Masterson and scores of other famous trigger men played leading roles.

"No man in the wrong can stand up against the fellow that's in the right and keep going," remarked Captain Bill McDonald of the Texas rangers. And in the end the bad men were rubbed out and the way paved for the law-abiding West of today.

The author, as a newspaper reporter in Denver during the latter part of the last century, knew some of his characters personally. He has been a prolific writer of western fiction for many years, having produced 28 novels with a total distribution of more than four million copies. His intimate knowledge of the history of the pioneer West has enabled him to produce a record that is both vivid and authentic. 269 pages. Bibliography, Index. \$3.00.

MORE LIGHT ON ANCIENT TRIBESMEN OF NEW MEXICO

Within the 26,000-acre Bandelier national monument, west of Santa Fe, New Mexico, is a little canyon, 13 miles long, called El Rito de los Frijoles (Little River of the Beans). Here, in the lower end, the Keres tribe of Indians made their homes over a period of about 400 years.

To learn about the prehistoric life which existed here, its relation to dimly marked streams of migration toward the Rio Grande, when and why the site was abandoned, has been the task of archaeologists since the 1880s. Analysis of material which has been found up to date is presented in **PREHISTORY OF EL RITO DE LOS FRIJOLES**, by J. W. Hendron, as No. 1 of the Technical Series published by Southwestern Monuments association, Coolidge, Arizona in June 1940.

Although this 69-page bulletin is a technical review, the layman interested in prehistory of the Southwest will find the methods and technique of the archaeologist as here presented an enlightening study.

Besides the many excellent photos, a series of folding maps and charts reveal details of the ground plans, location of the structures, and correlation of the pottery sherds to their respective periods and cultures.

Announcement of publication of popular and technical papers will be sent those who submit their names to Dale S. King, executive secretary and editor, Southwestern Monuments Assn., Coolidge, Arizona.

...

ARCHAEOLOGISTS REPORT ON INDIAN EXCAVATIONS

Data obtained from excavation of three sites in southeastern New Mexico form the basis of bulletin No. 10 in the Technical series issued by Laboratory of Anthropology at Santa Fe, New Mexico.

J. B. Jennings, in **A VARIATION OF SOUTHWESTERN PUEBLO CULTURE**, and Georg Neumann, in **ANALYSIS OF THE SKELETAL MATERIAL**, present their findings and tentative conclusions after a period of excavation and study in 1932 and 1933 at three sites in the Peñasco valley. Photos, maps, drawings; bibliography, 20 pages.

An addition to the general series published by the Laboratory is a 15-page bulletin by H. P. Mera, **SERRATE DESIGNS OF NAVAJO BLANKETRY**. It is an interesting summary of the evolution of the serrate pattern (based on acute angles) from the earlier classic design which had employed the rectangle element. This more complex design appeared at the time aniline dyes were introduced by Indian traders, and by the 1870s it had largely replaced the older patterns. 25c.

Gems and Minerals

This department of the Desert Magazine is reserved as a clearing house for gem and mineral collectors and their societies. Members of the "rock-hound" fraternity are invited to send in news of their field trips, exhibits, rare finds, or other information which will be of interest to other collectors.

—ARTHUR L. EATON, Editor—

COLLECTS MINERAL THAT FALLS FROM THE SKIES

H. N. Nininger of the Colorado museum of natural history has found an interesting hobby. He has been collecting star dust. He found that by placing a highly charged magnet at the exit from a downspout which carries off the rainwater from the roof of his house that after several heavy storms he has been able to collect a heavy, slate-grey dust, which is identical with the dust derived from burned-up meteors that have reached the earth. By a fine mathematical calculation he has figured that within a thousand years a film of this dust equal to the thickness of an ordinary sheet of writing paper falls upon the surface of the earth.

WULFENITE

At a recent meeting of the Imperial Valley gem and mineral society was shown a striking specimen of Wulfenite, or lead molybdate (PbMoO₄). The specimen is composed of large tabular crystals of tetragonal form. The color is between rich orange and red. Mines in several southern counties of Arizona are beginning to furnish fine specimens of this ore.

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BIRTHSTONES

September—Sapphire

Deep blue sapphire has been known for centuries as the birthstone for September. This stone is aluminum trioxide. Most persons think of it as occurring only in the one color. However, it appears in all shades of blue, red, yellow, brown, purple and many other colors. Some crystals show attractive combinations of as many as three colors. Its hardness of nine is second only to the diamond. Red alumina or sapphire is ruby, and green is called "oriental emerald."

The gem collector whose birthday falls in September can make a very colorful and extensive collection of stones, without going beyond the confines of this single, noble family.

Origins

AGATE—named from the river Achates (now Drillo) in Sicily, where the stone was originally found.

JASPER—from the French word meaning to mottle, originally from the Semitic.

CHALCEDONY—named from the Greek Chalkedron, a town in Asia Minor opposite Byzantium.

ONYX—word first applied by the Romans because of a fancied resemblance between its veins and the shades in the fingernail.

TURQUOISE—from the French turquoise, feminine of old French word turcois, meaning Turkish, because the first stones were brought from or through Turkey.

AMETHYST—Greek amethystos, or amethystos, a remedy for drunkenness. The amethyst is supposed to have the power to cure drunkenness.

SAPPHIRE—sanskrit sanipriya, dear to the planet Saturn.

Misnamed Minerals

"Turquoise"

Recently, a subscriber brought me a rather beautiful necklace, supposed to be imported turquoise, with the usual question: "Is it genuine?" The test was simple and easy as she was quite willing to sacrifice one bead.

When this bead was placed in a bath of ammonia, the lovely blue color soon transferred itself from the bead to the liquid, showing artificial color. Then the bead was placed on a sheet of metal over the bunsen burner. In a very short time a nauseating odor became very evident. The necklace had been made of old bone, shaped into beads and artificially colored.

These tests have no effect usually on either imported or domestic turquoise, provided it is genuine. A. E.

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• • •

New Gem Location

A customer at a Gunter, Texas, lunch counter bit into his hamburger sandwich and complained that it contained ground glass. The woman restaurant owner discovered that the "glass" was the diamond from her ring.

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Set contains streak testing block, bottle of mounting glue, small hand lens, 25 printed mounting cards, and instruction manual for gathering and classifying your gem collection.

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Cogitations . . .

Of a Rockhound

By LOUISE EATON

Rockhounds loves nacheral scenery an they dislikes to see it cluttered up with tin cans an eggshells 'n such. True rockhounds always cleans up their campgrounds, burning papers n' burying other junk. It sorta spoils the delight o' the outdoors to be confronted with a mess of garbage where you wants to pitch your tent. An it seems that careless campers dumps or leaves their trash in all the beautiful spots. Its almost tragic to have that exalted "we were the first" feeling shattered by a sardine can.

• • •

It ain't like the flu ner measles, but it sure is catchin. You maybe gets it from a bug bite, or through your eyes an ears. Anyhow, "Rockhounitis" is a disease that's goin roun, an once you has it, recovery is practically uncertain. It gets in yur blood an yu can't shake it. Yu don't wantta. Rockhounitis is infectious. Yu don't hardly have to get near a rockhoun but what yu takes it, an it impels yu to leave yur comfortable home an hunt rocks. Yu begins to wish yu didn't have to work, an yu spends more n' more of your spare time crawling over the scenery. Howsover, Rockhounitis is one of the pleasantest maladies.

• • •

A lotta things in this life is so or not so, just by comparison an' according to what yu're used to. Frinstance, take a desert rat an' put him in the high mountains, when they'r havin a long hot spell, or so they say, an' the desert rat can just about freeze. An' then again, what's just a little sprinkle to folks what lives in a wet climate, bout drowns out a desert dweller. Its nice to get outta round an' see what other folks has, but its grand to be satisfied with what yu got.

• • •

Was you ever mongst a pack uv rockhouns when someone perduced a new er unusual specimen? Each one grabs into his pocket an fetches out a magnifyin glass an a quartz crystal an they all goes to work on the specimen. They looks at it, licks it, an scratches it. If it shows a scratch, they does a lot of discussing an concurrin. If it wont scratch, they knows they've got sumpin good, and all talk at wunst, sayin what it isn't, an what it may be. Finally they agrees—er else don't.

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Feature a more important place than ever before, the mineral division at Los Angeles county fair in Pomona, September 13 to 29, is expected to be one of the most popular attractions at the big agricultural and industrial exposition.

The division is divided into fourteen departments covering placer gold, lode gold specimens, gold bearing gravels, lode gold ores, mill products of gold, silver and silver ores, polished marble, polished granite, dressed stone, polished specimens of onyx marble, uncut gem materials mined in California, cut and polished gem materials, polished specimens of petrified wood and petroleum and petroleum products.

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AMONG THE

ROCK HUNTERS

Von M. Springer, amateur rockhound and shepherd, formerly of Brawley, California, now spends his summers with sheep in Oregon. As he wanders here and there, he gathers choice specimens. His curios include the complete set of teeth of an elk. But among his special pets are choice pieces of cinnabar from different Oregon mines, including Horse Heaven mine on John Day river. The specimens are beautiful cinnabar red, with tiny spots of marcasite.

The bulletin of Western Mineral exchange, of Seattle, invites all collectors to visit the Pacific northwest, claiming that Washington produces the finest varieties of semi-precious gem material that exist in the nation, listing 94 specimens besides fossils.

The rotund proprietor of Cook's agate shop, of Beverly Beach, Oregon, reports that agate hunting is excellent for reducing the waist line. Two months of strenuous beach combing have added to his weight but taken nearly four inches off his circumference.

Anyone approaching Bend, Oregon, is greeted by notices of the free Museum of Wonders. As you enter the shop, Percy L. Forbes introduces himself with: "I'm a freak! Everybody around here looks on me as a freak!" His pet possession, a letter addressed to:

"Chief Hole in the Pants,
Museum of Wonders,
Bend, Oregon."

However, his museum of flower agates, brilliant iridescent obsidian, and Indian curios well repays a visit.

Long Beach, California, Mineralogical society held an outdoor meeting and picnic in Pt. Firmin park in the Palos Verdes hills. Minerals to be found in the cliffs along the Pacific in that area are fine bladed barite and selenite crystals. Geodes are found on the terrace above Malaga cove.

Deschutes Geological club at Bend, Oregon, is making a special study of the lava cast forest east of La Pine. The club meets the first Saturday in each month and officers are: Howard A. King, president; Winnie Boylan, vice president; Mrs. Waters, secretary.

Officers of the Newport Agate society in Oregon are Will L. Grigsby, Newport, president; Mr. Peterson, Agate Beach, vice president; Walter Duvaney, Toledo, second vice president; Nettie Adkinson, Newport, secretary; Laura Grigsby, Newport, secretary. The society meets once a month in Recreation hall.

COMPETITIVE EXHIBIT FOR CALIFORNIA SOCIETIES

According to Orlin J. Bell, president of the East Bay Mineral society of California, each member society of the California Federation is to be urged to enter an exhibit at the annual federation meeting next year. "The material used in each of these exhibits," writes Bell, "need not be owned by the society as a whole, but may be made up of specimens owned by the individual members."

This is to be a competitive exhibit and in addition to first and second prizes there will be a perpetual loving cup awarded, to be held by the winning society from year to year. More details regarding the entries will be available later.

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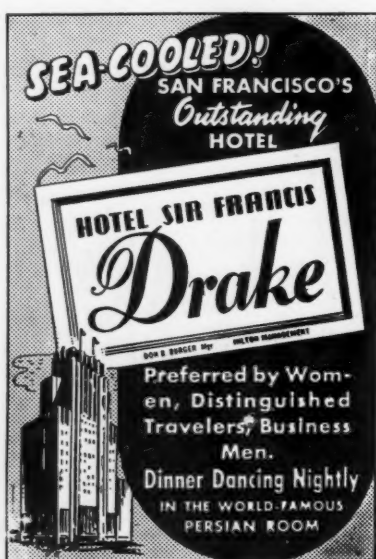
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ZABRISKIE POINT

Winner of the July Landmark contest of the Desert Magazine was Dorothy Clara Cragen, superintendent of schools in Inyo county, California. She identified the accompanying picture as Zabriskie Point on the edge of Death Valley, and her story of this scenic lookout is reprinted on this page.



By DOROTHY CLORA CRAGEN

I recognize the picture in your July Landmark contest as Zabriskie Point, located in Death Valley, just a short distance from Furnace Creek Inn.

Leaving the Inn over Highway 190, going toward Death Valley junction, the highway follows Furnace Creek wash. A winding road turns off to the left about three miles from the Inn—and to the desert lover this will prove an enchanting road for it ascends the hill three-tenths mile and ends at a lookout point surrounded by a low rock wall.

From here, like the girl in the picture, one can drink in a scene worth traveling many miles to see. The desert colors here change every hour from early morning until night—and even on a moonlight night it is a never-ending panorama of beauty.

My work takes me along Highway 190 almost every month, and I seldom pass this winding side road without driving to Zabriskie point. Like thousands of other motorists I park my car and sit on the edge of the parapet and gaze in awe at the colorful picture nature has created here as the shadows creep over the walls and canyons.

Manly Beacon, named for the hero of

the Bennett-Arcane tragedy in Death Valley history, is just to the right of the view shown in this photograph. An old trail into Death Valley crossed these eroded hills below the present parking spot.

Zabriskie's Point is named for C. B. Zabriskie, former executive head of the Pacific Coast Borax company who in 1889 helped get the company's wagons out of Death Valley. Mr. Zabriskie died several years ago, but according to those who knew him he was worthy of the tribute given him when this place was named for him.

From the point one looks across the floor of Death Valley to the Panamint range on the west. The Funeral mountains are to the northeast and the Black mountains to the south.

CREED OF THE DESERT

By JUNE LE MERT PAXTON

I was a palm, a stately palm;
I graced a canyon, deep.
Until a fire by thoughtless man
Brought havoc in its sweep.

Natural Landmark in Arizona

Who can identify this picture?



Prize Contest Announcement

This month's Landmark is an imposing natural rock monument in eastern Arizona—a pinnacle well known to those who have traveled the Navajo reservation.

In order that all the readers of the Desert Magazine may become acquainted with this unusual formation a cash prize of \$5.00 will be paid to the person who sends in the best descriptive story about

this Landmark. The manuscript is limited to 500 words.

All available information should be given — accessibility to roads or highways, mileage from nearest settlement, approximate dimensions, nature of rock, and any historical or legendary information that may be known.

The contest closes September 20 and the winning story will be published in the November issue of the Desert Magazine.

RECORD YEAR FOR TRAVEL PREDICTED IN 1940

Neither war nor weather has stopped the tourist army on the home front. American travelers are seeing America first, with six billion dollars to spend. The figures come from W. Bruce McNamee, director of the United States travel bureau at Washington, D.C.

After an increase in visitors to national parks during the first three months

of 1940, there was a marked decline—just about the time of the invasion of the low countries in Europe—reports Miss Isabelle F. Story, editor in chief for the park service. "But figures now show that the American people are realizing again the benefits of travel to health and mental attitude," declares Miss Story. It is predicted national parks in 1940 will register 20,000,000 visitors, as against 16,233,688 in 1939.

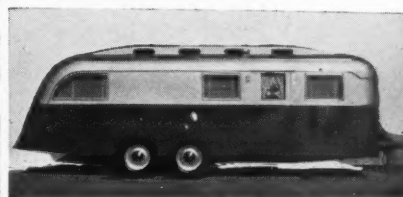
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By RANDALL HENDERSON

LATE in July Fred Ferguson and I took the trail from Idyllwild to San Jacinto peak. Al Bottel and Gregory Esgate of Idyllwild arranged the trip and packed grub and bedding to Round valley meadow near the top so our party of 42 riders could spend the night up there.

Not many people outside the immediate area, are aware that the timbered wilderness on upper San Jacinto mountain is a California state park. And yet, for rugged scenic beauty there is no other mountain region in Southern California to compare with it.

We stopped for an hour on the rim of the precipitous east face of the mountain and looked down on Palm Springs and out across the shimmering Colorado desert while Culver Nichols told about plans proposed by Palm Springs people for the building of an aerial tramway from the desert to a point near Hidden lake, not far below the summit. It would cost over a million dollars. Fantastic perhaps—but Americans have a genius for doing spectacular things.

A camp of CCC boys worked on the mountain three years ago, and erected a stone shelter house at the top. It is a haven for weary climbers who scale the 10,805-foot peak the hard way—that is, on foot with packs on their backs. The door of the shelter hut is never locked, and one of our party commented on the lack of any evidence of vandalism. The answer is that the kind of people who ransack unoccupied cabins and deface the landscape do not climb high steep mountains. The destruction of unguarded landmarks invariably is the handiwork of morons who lack the fortitude to venture far from the easy trails.

My republican friends assure me that Wendell Willkie will be the president of the United States after November. If true, I wish the new president would figure out a way to coordinate the work of the federal departments. I saw the need for it at Round valley.

The CCC established a very comfortable camp, including a substantial administration building with a concrete floor. It cost many hundreds of dollars to pack the lumber and cement on the backs of mules up that long mountain trail.

The building would have made a fine permanent shelter for hikers and riders who follow the San Jacinto trails. But it seems that before the camp could be established the CCC had to enter into a contract with the forestry service to clear the site when the project was completed. And so the building is being wrecked and the splintered timbers used for firewood.

But please do not construe this as criticism of the Civilian Conservation corps. Whatever else you and I may think about the New Deal, we are bound to recognize the merit in the work these boys have done. And probably the most lasting benefits are physical and moral values which have accrued to the boys themselves.

I spent one of my midsummer weekends calling on my desert neighbors. I drove along the north shore of Salton sea until I came to Gus Eilers' Date Palm beach. I'd rather go swimming there than in the Pacific anytime. The ocean is all right for those hardy folks who are used to it—but after one has lived on the desert 30 years the more moderate temperature of our big desert swimmin' hole is much more comfortable.

We dived off the end of the pier just as the sun was sinking behind the Santa Rosa mountains—one of those gorgeous desert sunsets the artists have been trying to copy—and have never succeeded.

Gus told me the highly mineralized water of the sea has important medicinal value. I cannot vouch for that—but I am willing to testify that a sunset swim in the big desert pond at the end of a 115-degree summer day is an exhilarating experience.

That night I camped on the beach, and then drove up in the Indio mud hills to spend a few hours with Paul Wilhelm at the 1000 Palms oasis. I found Paul pecking away at the typewriter—working on a story he is going to submit to the Desert Magazine later.

Paul has had a varied experience on the desert—and not all of it easy. There were times when he ran out of grub on the meager plant and animal life of a region so barren it is shunned even by the jackrabbits. It took him a half day to harvest a cupful of chia seed.

But he has the soul of a poet—the kind of a poet who can get as much satisfaction out of a crust of bread and a beautiful sunset as you and I get out of a T-bone steak.

Then I followed the Palms-to-Pines highway up to the little stone cabin Nina and Steve Shumway have built on the side of Asbestos mountain, overlooking the desert.

Steve has a date garden in Coachella valley. There's a heavy crop of fruit on the date palms this season, and with exports from the Mediterranean region practically stopped, the prospects appear bright for the growers to recoup the losses they suffered last year when the September rain storms practically ruined the crop.

The days are getting shorter. October will bring cool nights to the desert. And then we'll shake the moth balls out of the sleeping bag, hang it out to air—and be ready again to follow those winding desert trails which lead to remote canyons and historic landmarks. The longer I live on the desert the more I look forward each year to the coming of fall season and the opportunity to resume my weekend trips to the thousand and one places I have not yet visited. Every new excursion suggests a dozen more. The Desert Magazine will be telling you about many of these places during the coming winter.

Moapa, Nevada

Dear Mr. Henderson:

An item in the July issue of your Book attracted my attention and when the August issue arrived the other day and after I perused it carefully I just couldn't keep quiet any longer.

Peg-Leg Smith never had no mine—I don't give a dang what Mr. Hill claims he has found, I sincerely hope he has hit a pay streak but as for it being Peg-Leg's lost mine I snort, "Bolony!" I'll grant that Peg-Leg might have passed within 50 or 100 miles of it as well as the Mormon Battalion and a thousand others in years gone past.

A number of years ago I had a prospecting partner who was a native of the Yuma country, this old chap said his father and Smith were close friends and Smith stopped at their ranch several times. One time Smith stayed with them two weeks when he was sick and my old partner's mother nursed Smith back to health. The morning Smith left he gave this lady three small black gold nuggets and said, "Next time I'm back here I will give you some more of them so you can have a necklace made out of them." To prove it this old partner of mine had two of the black nuggets Smith gave his mother. She gave them to her son, for Smith never returned to their place again, he died on that trip.

My partner said his father and Smith were talking and when my partner's father asked Smith how big the ledge was Smith replied, "She's in no ledge, I pick her up out of the dirt in a little valley high in the mount'ins. When I go there I start walking 'round kicking up the dirt and pretty soon I find a piece, then I find more."

I have heard my old partner tell that story many times and I believe it to be true and correct. Coupled with the excellent article, "Black Gold," by Mr. Mitchell in the July issue I believe it more strongly than ever. The question in my mind is this: Did Smith find the valley as in Mr. Mitchell's article or did he find some other valley which was the site of an ancient Indian encampment and pick his black gold up where the Indians had left it? You figure it out. I say there is a chance both ways.

My old partner made many intermittent searches for the little valley Smith told his father about. One trip when I was with him we wore out a Model-T and walked seven jacks foot-sore without finding any gold. I am planning a trip into the Bullion range next spring with a couple Indian friends of mine here on the Piute reservation. One of these Indians was born and raised in the Twenty-nine Palms country. He is in his late 60s and he said after I read Mr. Mitchell's article, "I hear, 'old people tell 'bout him—debil live there,' mabby so we find him again—I show you where it is—you go I stay on mount'n." I am going to outfit for a month and give her a whirl if possible. This old Indian has promised to show me a place where the "Old People" dug turquoise also.

That Bullion range is quite a sizeable country as you well know. I do at least, and the trip might draw a blank as thousands of other trips have done but as the only difference between a prospector and a jackass is two legs and a few inches on the ears, wish me luck, for there is no cure for the man who follows dead-end trails.

Coming back to why and whereof of this letter I still say "BOLONY!" to Mr. Hill. Peg-Leg Smith never carried a pick and shovel in his life, he traveled light so how in the H - - - ! can Mr. Hill find a mine he says is Peg-Legs when Peg-Leg did his mining with the toe of his boot?

I'm just a ragged old desert rat who is as ignorant as an old cow but when some fellow brings in a sack of black nuggets that show yellow after you scratch them then I'll say the

LETTERS

little valley Peg-Leg Smith got his black nuggets from has been found. Until then I will snort, "Bolony!" when I hear some gent says he has found the "Peg-Leg."

Sorry to clutter up your day's mail and I apologize for doing it but I couldn't keep quiet, please forgive me.

BRADLEY R. STUART.

• • •

Oakland, Calif.

Sir:

Enclosed find P.O. money order for \$2.50. It is hoped that this will be sufficient to renew my subscription and give me also a binder.

While in Nevada, a visit was made to Goldfield. Mrs. Lena Knight of the Goldfield highway auto camp directed us to some petrified wood deposits there. However, it was found that the best way to get the material was to purchase it from Mrs. Knight. Her prices are so low that they equal the cost of gasoline consumed. The variety is wide and one gets the advantage of starting with a selected supply.

During Easter vacation, two cars of members of the Eastbay Mineral society visited the desert in search of polishing material. One car, driven by Buster Sledge, followed directions given by Mr. Hilton in the Desert Magazine for the Cave Springs district. On return, both agreed on one point. Mr. Hilton gives accurate directions which, if followed, will give the results described. Our thanks to Mr. Hilton and the Desert Magazine.

H. W. HANSEN.

• • •

Hollywood, California

Dear Mr. Henderson:

I like the Desert Magazine very much, but put the gem travelogs back in or I'll cancel my subscription. Now please!

J. E. GASTON.

Dear J. E.—Either you're crazy or I am. We've had a field trip for gem collectors in every issue for the past year, and two of them in the August number. I believe you got the DM mixed up with the Hootowl Gazette or some other publication. Anyway, the field trips are in to stay.

—R.H.

• • •

Costa Mesa, Calif.

Dear Mr. Henderson:

It was quite by chance that I picked up one of your Desert Magazines last winter in Palm Springs. I enjoyed that one copy so much that I have purchased one each month since that time. I have also sent copies to a number of my friends so that they may become acquainted with a magazine chuck full of interest.

We also use the Desert Magazine as a guide to interesting places that I am sure we otherwise would not have known about. One of the most interesting of these trips took us Tuba City, Cameron and Moencopi, in the Indian country of northern Arizona—a trip that shall long be remembered!

We also stopped in the little western town of Flagstaff for the Indian Pow-Wow that they hold each year for three days in July. All the advertising you give it fails to produce any inkling of the real thrills one receives at actually being there to wander about the camp-

fires of about seven thousand Indians — to say nothing of the rodeo, or the picturesque dances given by the various tribes each night!

During our stay in Flagstaff we visited with the Willis Browns, who have been in the jewelry business there for 25 years. I think their idea of a Guest House is so quaint that I feel sure some of your readers might be interested—particularly those living around the Indian country.

Mr. and Mrs. Brown are so much the perfect host and hostess that they often find themselves swamped with guests. To solve the guest room problem they are having a Navajo hogan constructed on their property in real Indian fashion. Of course it will be slightly modernized but it will face the east, and generally carry out the Navajo home. Instead of the usual guest book to register in they will have one of the huge logs polished off for each visitor to carve his name on. I have just finished a plaque to be placed at the top of this post and will send a copy to you.

Many thanks for a perfectly grand magazine and we wish you years, and years of business.

JEAN THOMAS.

• • •

Drifton, Pa.

Dear Sirs:

We are re-subscribing to the Desert Magazine because it is the only one of its kind. We know and like the Southwest desert country and like to read about it. But I am sorry to say we are disappointed in your magazine.

The articles are very much the same from month to month and not very interesting or informative, and rather too sentimental. However, it's better than no Desert Magazine at all, so we are re-subscribing, and hoping it will get better yet. Your covers are swell!

CHRISTOPHER YOUNG.

• • •

Stevens Village, Alaska

Dear Mr. Henderson:

From the north bank of the central Yukon river in Alaska to the southwestern desert is a considerable distance. My father, who advertises minerals in your excellent publication recently sent me my first copy of The DESERT Magazine. I want to compliment you most sincerely on its make-up, on the contents, especially the photographs.

As an old 'desert rat' myself of the Wyoming variety I am more than pleased to learn that such a magazine as yours is now before the public. It becomes a medium by which lovers of the desert regions may shout their love to the house tops as all true lovers of anything have an almost uncontrollable urge to do. I myself, despite several years residence in the sub-arctic hinterland of Alaska, and the distant Aleutian Islands, am one of the most ardent lovers of the Southwest.

Meanwhile you have no idea how much cheer a glimpse of that sunshiny Southwest brings to me here lost away on the edge of the arctic circle. Last winter was, bar none, the most sunless, murky, opaque, cheerless winter I ever spent. If I'd known about your magazine then, I would have had you send it airmail to replace the total absence of sunlight here. It has everything over codliver oil to raise depressed spirits.

So, more power to you for a continuance of The DESERT Magazine. I would like to see you include the northern desert area of Wyoming, Utah, southern Idaho, etc etc., in your content since I know of no publication dealing with this region. But even if you stick to the Southwest, you've got the best magazine ever. Look for my subscription as soon as I get back to civilization again.

J. ELLIS RANSOM.

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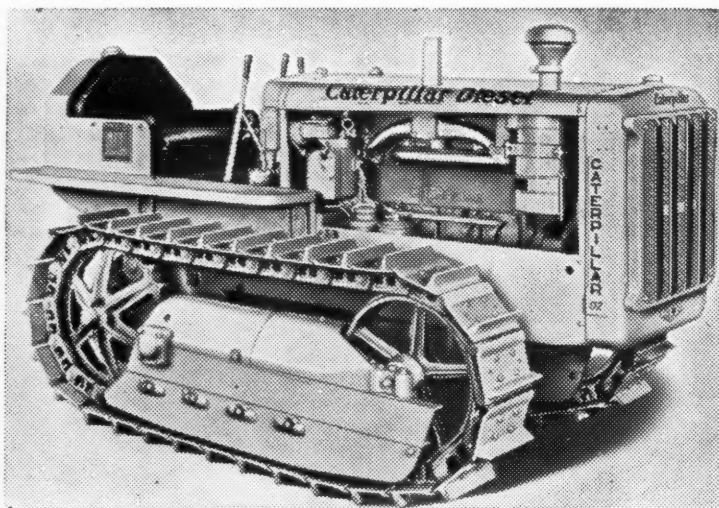
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